Service Manual

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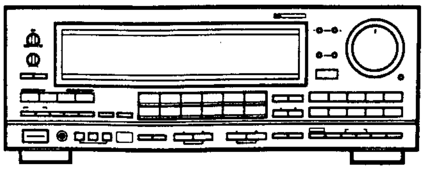
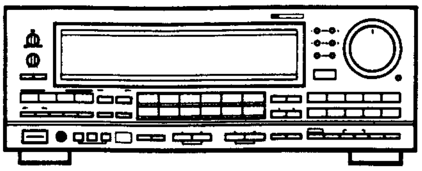
The future of sound and vision.


(VSX-7500S)


(VSX-9500S)

ORDER NO.
ARP1838

AUDIO/VIDEO STEREO RECEIVER

VSX-9500S
VSX-7500S

VSX-9500S AND VSX-7500S HAVE FOLLOWING VERSIONS:

Type	Applicable model		Power requirement	Export destination
	VSX-9500S	VSX-7500S		
KUC	○	○	AC120V only	U.S.A.and Canada
SD/G	○	○	AC110V,120V−127V,220V,240V (switchable)	U.S.Military

- **This manual is applicable to the VSX-9500S/KUC, SD/G, VSX-7500S/KUC and SD/G types.**
- **For the VSX-9500S/SD/G, VSX-7500S/KUC and SD/G types, refer to page 74−77.**

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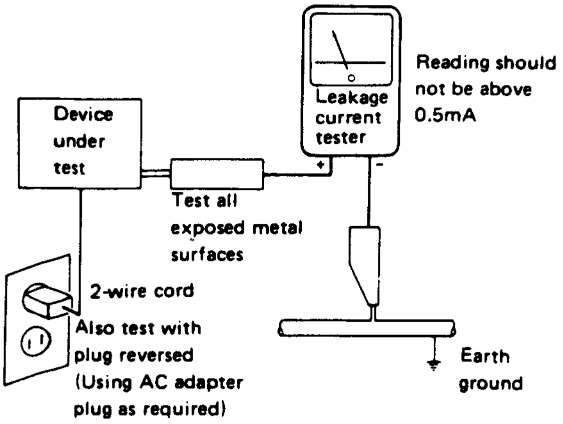
1. SAFETY INFORMATION

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Device under test
Leakage current tester
Reading should not be above 0.5mA
+
-
Test all exposed metal surfaces
2-wire cord
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

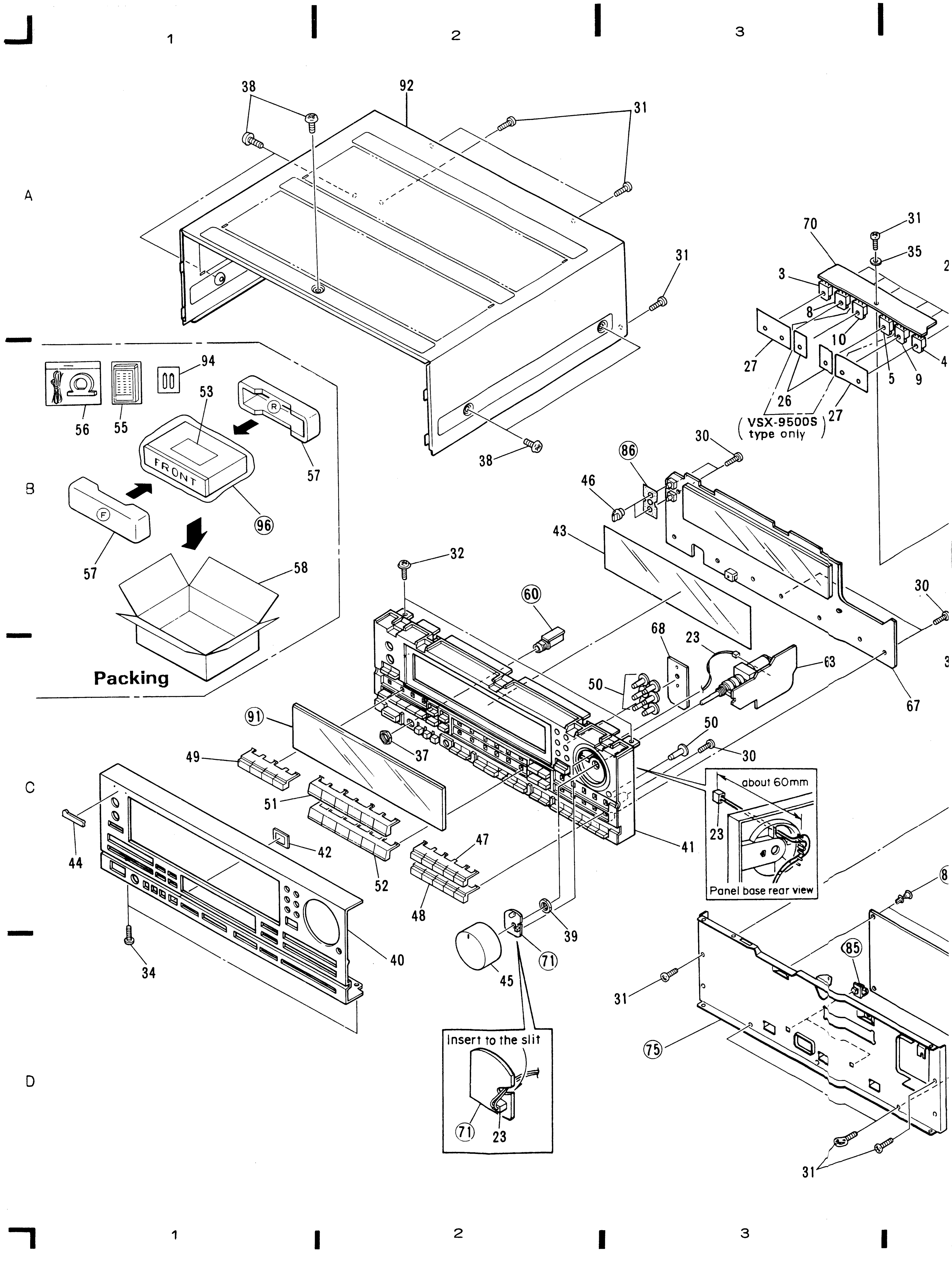
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Mark	No.	Part No.	Description
	1	AWK1219	S TERM/CENTER SP ASSY
	2	AWX1025	PRO LOGIC ASSY
⚠	3	2SA1263N	TRANSISTOR Q 7
⚠	4	2SA1263N	TRANSISTOR Q 8
⚠	5	2SA1263N	TRANSISTOR Q 10
⚠	6	2SA1302	TRANSISTOR Q 3
⚠	7	2SA1302	TRANSISTOR Q 4
⚠	8	2SC3180N	TRANSISTOR Q 5
⚠	9	2SC3180N	TRANSISTOR Q 6
⚠	10	2SC3180N	TRANSISTOR Q 9
⚠	11	2SC3281	TRANSISTOR Q 1
⚠	12	2SC3281	TRANSISTOR Q 2
	13	ATS1205	POWER TRANSFORMER
⚠	14	AKX1004	VOLTAGE SELECTOR S 1
	15	AKM1019	JUMPER PLUG
⚠	16	AKP-515	AC SOCKET 3-P
⚠	17	AEK-109	FUSE(6A) FU 3
⚠	18	AEK-109	FUSE(6A) FU 4
⚠	19	AEK-120	FUSE(1.25A) FU 5
⚠	20	AEK-120	FUSE(1.25A) FU 6
⚠	21	AEK-310	FUSE(10A) FU 1
⚠	22	ADG1031	AC POWER CORD
	23	ADX1191	2P WIRE ASSY
	24	AMR1434	INSULATOR ASSY
	25	AMR1435	INSULATOR ASSY
	26	AEC-818	MICA SHEET
	27	AEC1140	MICA SHEET
	28	AEE1033	MICA SHEET
	29	ABA-297	SCREW
	30	ABA-298	SCREW
	31	ABA1009	SCREW
	32	ABA1011	SCREW
	33	ABA1034	SCREW
	34	ABA1048	SCREW
	35	ABE-053	WASHER
	36	ABF1018	BUSH
	37	ABN-065	NUT
	38	FBT40P080FZK	SCREW
	39	NK90FUC	NUT
	40	ANB1302	FRONT PANEL
	41	AMB1494	BASE
	42	AAK1783	FILTER
	43	AAK1513	PVC FILTER
	44	AAM1029	NAME PLATE (METAL)
	45	AAB1056	ROTARY KNOB
	46	AAB1078	ROTARY KNOB S
	47	AAD1394	HINGE KNOB
	48	AAD1395	HINGE KNOB
	49	AAD1396	HINGE KNOB
	50	AAD1398	TACT KNOB
	51	AAD1570	FUNCTION KNOB
	52	AAD1571	FUNCTION KNOB
	53	ARB1173	OPERATING INSTRUCTIONS
	54		....
	55	AXD1100	REMOTE CONSOLE UNIT
	56	AEA1007	ANTENNA KIT
	57	AHA1164	PAD
	58	AHD1620	PACKING CASE
	59	....	....
	60		HEADPHONE ASSY
	61		FUSE ASSY
	62	AWZ2507	AF ASSY
	63	AWZ2509	MOTOR-VOL
	64	....	....
	65	AWZ2511	VIDEO/SUR/CONTROL ASSY
	66	AWZ2512	TUNER ASSY
	67	AWZ2513	FRONT CONTROL A ASSY
	68	AWZ2514	FRONT CONTROL B ASSY
	69	AWZ2515	METER AMP ASSY
	70	AWZ2516	REAR AMP ASSY
	71		VOL IND ASSY
	72		TERMINAL SCREW
	73		CHASSIS
	74		REAR PANEL
	75		PANEL STAY
	76		BOTTOM PLATE
	77		HEAT SINK
	78		SUB HEAT SINK
	79		PCB SUPORT
	80		JACK HOLDER
	81		....
	82		PIN GROMMET
	83		PCB SUPORT
	84		PCB HOLDER
	85		PCB SUPORT
	86		BLIND SHEET
	87		....
	88		....
	89		....
	90		....
	91		ACRYLIC PANEL
	92	AZN1804	BONNET CASE
	93		....
	94		AM4 BATTERY(1.5V)
	95		....
	96		SHEET



RUCTIONS

LE UNIT

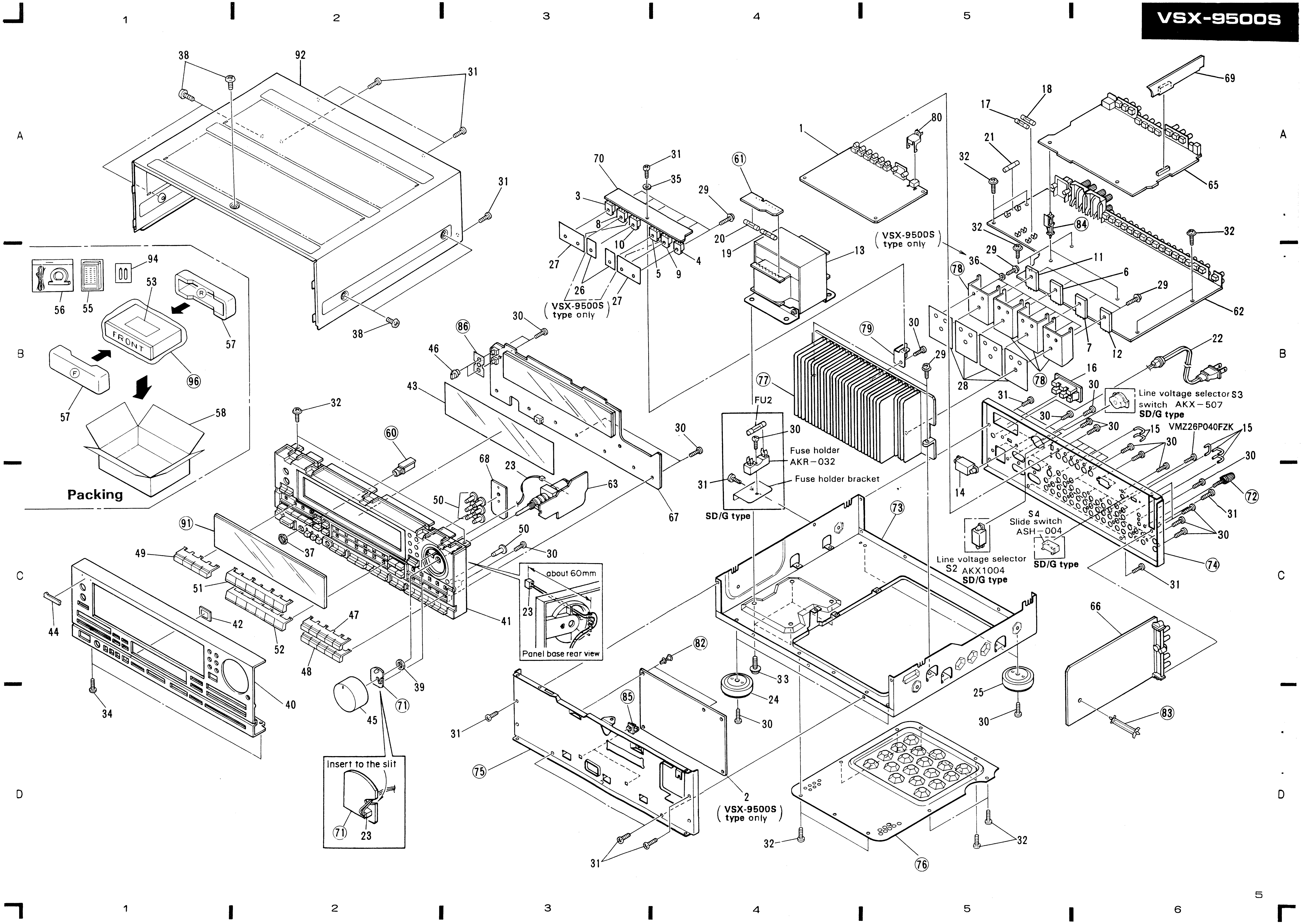
Y

NTROL ASSY

L A ASSY
L B ASSY
Y

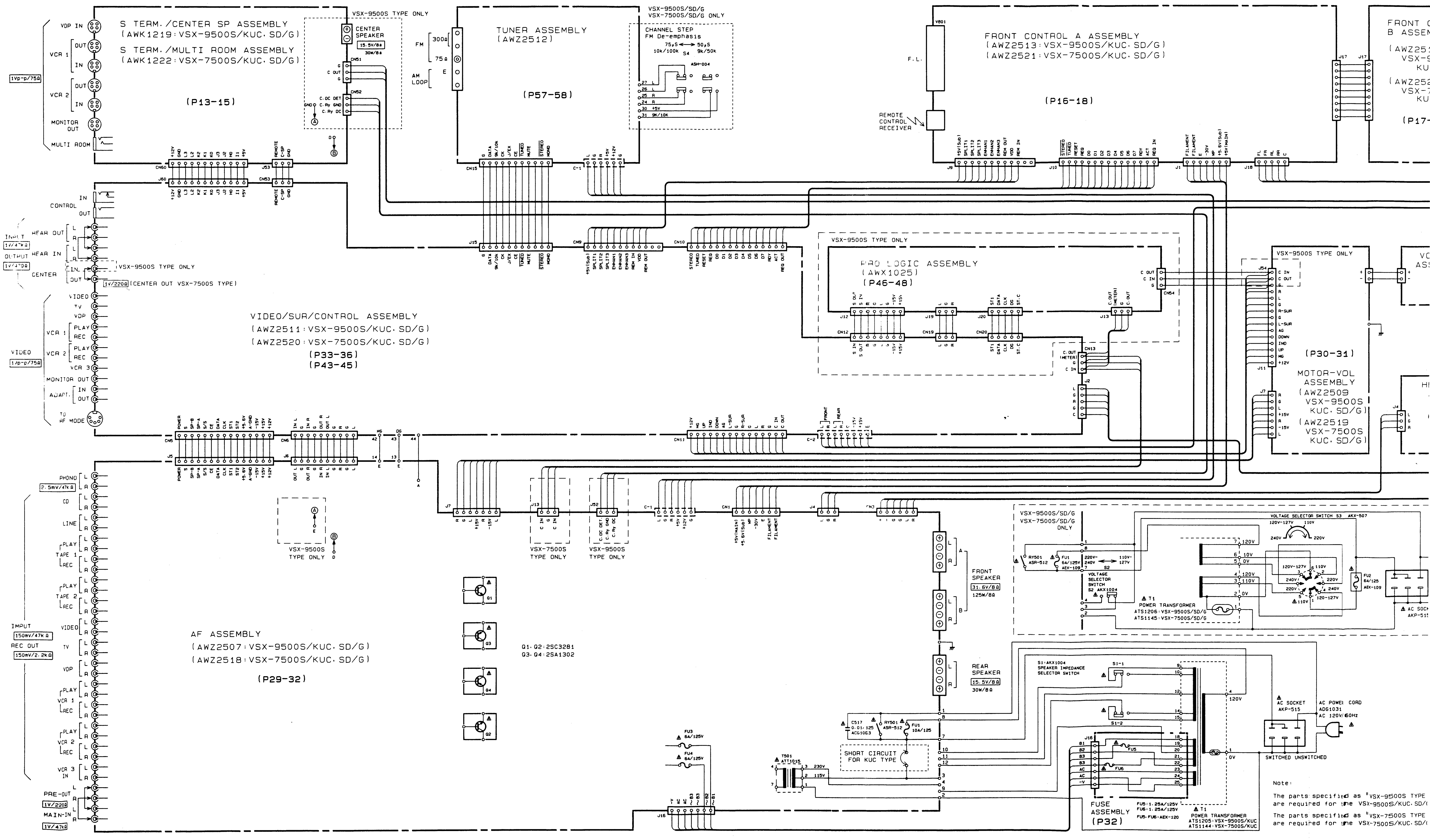
EW

1.5V)

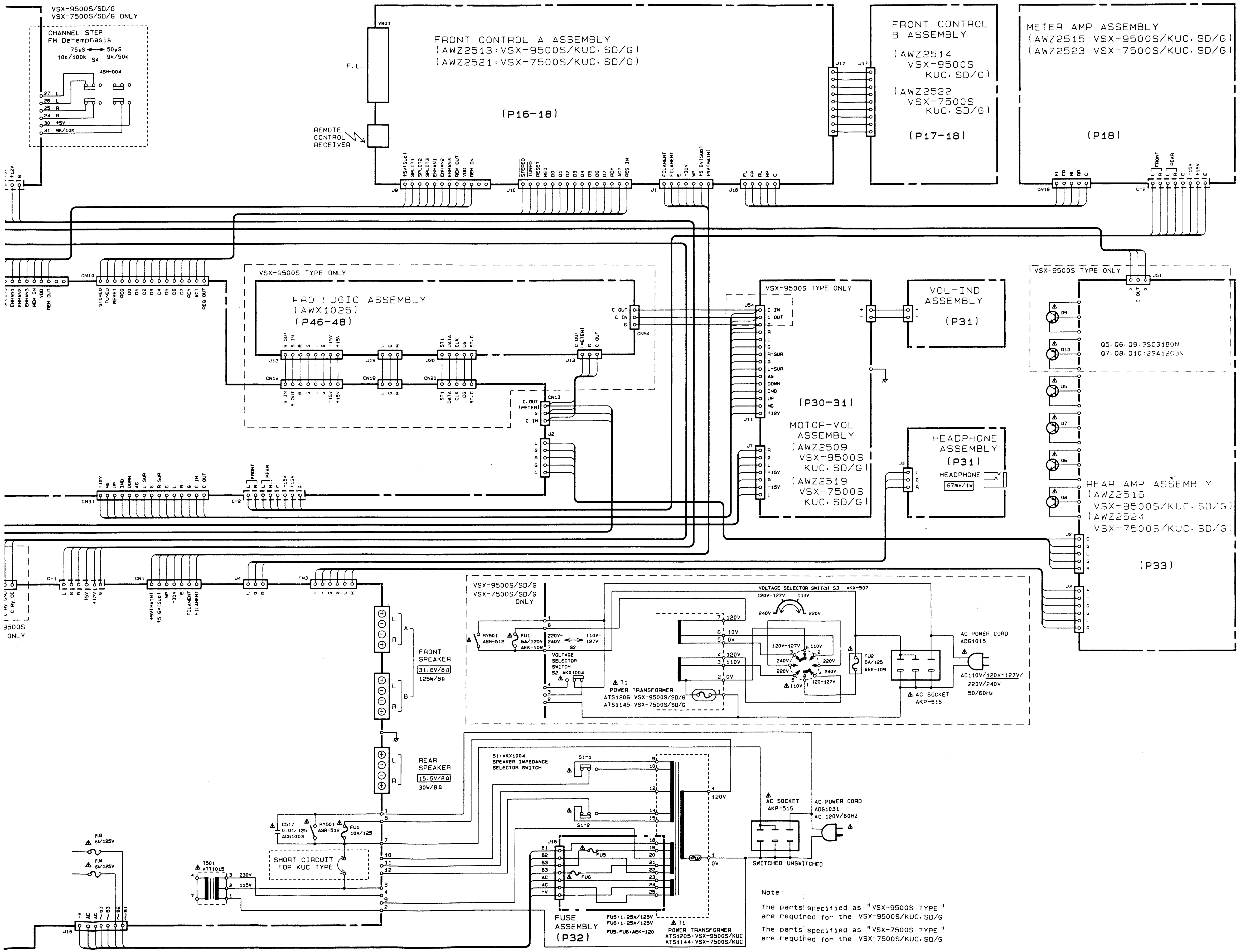

1
2
3
4
5
6
A
B
C
D
38
92
31
70
35
29
3
8
10
5
9
4
27
26
27
VSX-9500S type only
20
19
61
13
1
80
17
18
21
69
65
32
84
VSX-9500S type only
36
29
11
6
29
62
78
7
12
28
78
16
22
94
56
55
53
57
R
FRONT
96
F
57
58
Packing
86
46
30
43
67
79
77
30
29
30
FU2
30
Fuse holder
AKR-032
Fuse holder bracket
31
SD/G type
31
30
30
Line voltage selector S3
switch AKX-507
SD/G type
15
VMZ26P040FZK
15
30
30
14
72
31
30
S4
Slide switch
ASH-004
SD/G type
Line voltage selector
S2 AKX1004
SD/G type
74
31
32
60
68
23
63
50
91
37
50
30
49
51
42
52
47
48
41
about 60mm
23
Panel base rear view
44
34
40
45
71
39
73
82
85
33
24
30
25
30
66
83
31
75
2
VSX-9500S type only
31
76
32
32
Insert to the slit
71
23

3. SCHEMATIC DIAGRAMS AND P.C.BOARDS CONNECTION DIAGRMS

3.1 OVER ALL SCHEMATIC DIAGRAM


S TERM./CENTER SP ASSEMBLY
(AWK1219: VSX-9500S/KUC, SD/G)
S TERM./MULTI ROOM ASSEMBLY
(AWK1222: VSX-7500S/KUC, SD/G)
(P13-15)
VSX-9500S TYPE ONLY
CENTER SPEAKER
15.5V/8Ω
30W/8Ω
VDP IN
VCR 1
VCR 2
OUT
IN
MONITOR OUT
MULTI ROOM
1Vp-p/75Ω
TUNER ASSEMBLY
(AWZ2512)
(P57-58)
FM 300Ω 75Ω
AM LOOP
VSX-9500S/SD/G
VSX-7500S/SD/G ONLY
CHANNEL STEP
FM De-emphasis
75μS ⟷ 50μS
10k/100k S4 9k/50k
FRONT CONTROL A ASSEMBLY
(AWZ2513: VSX-9500S/KUC, SD/G)
(AWZ2521: VSX-7500S/KUC, SD/G)
(P16-18)
F.L.
REMOTE CONTROL RECEIVER
FRONT C
B ASSEM
(P17-
CONTROL IN OUT
INPUT 1V/47kΩ
OUTPUT 1V/220Ω
REAR OUT
REAR IN
CENTER IN OUT
VSX-9500S TYPE ONLY
1V/220Ω (CENTER OUT VSX-7500S TYPE)
VIDEO/SUR/CONTROL ASSEMBLY
(AWZ2511: VSX-9500S/KUC, SD/G)
(AWZ2520: VSX-7500S/KUC, SD/G)
(P33-36)
(P43-45)
VIDEO 1Vp-p/75Ω
VIDEO TV VDP
VCR 1 PLAY REC
VCR 2 PLAY REC
VCR 3
MONITOR OUT
ADAPT. IN OUT
TO RF MODE
VSX-9500S TYPE ONLY
PRO LOGIC ASSEMBLY
(AWX1025)
(P46-48)
VSX-9500S TYPE ONLY
MOTOR-VOL ASSEMBLY
(AWZ2509 VSX-9500S KUC, SD/G)
(AWZ2519 VSX-7500S KUC, SD/G)
(P30-31)
PHONO 2.5mV/47kΩ
CD
LINE
TAPE 1 PLAY REC
TAPE 2 PLAY REC
INPUT 150mV/47kΩ
REC OUT 150mV/2.2kΩ
VIDEO TV VDP
VCR 1 PLAY REC
VCR 2 PLAY REC
VCR 3 IN
PRE-OUT 1V/220Ω
MAIN-IN 1V/47kΩ
AF ASSEMBLY
(AWZ2507: VSX-9500S/KUC, SD/G)
(AWZ2518: VSX-7500S/KUC, SD/G)
(P29-32)
VSX-9500S TYPE ONLY
VSX-7500S TYPE ONLY
VSX-9500S TYPE ONLY
Q1, Q2: 2SC3281
Q3, Q4: 2SA1302
FRONT SPEAKER 31.6V/8Ω 125W/8Ω
REAR SPEAKER 15.5V/8Ω 30W/8Ω
VSX-9500S/SD/G
VSX-7500S/SD/G ONLY
RY501 ASR-512
FU1 6A/125V AEK-109
VOLTAGE SELECTOR SWITCH S2 AKX1004
T1 POWER TRANSFORMER
ATS1206: VSX-9500S/SD/G
ATS1145: VSX-7500S/SD/G
VOLTAGE SELECTOR SWITCH S3 AKX-507
FU2 6A/125 AEK-109
AC SOCKET AKP-515
S1: AKX1004 SPEAKER IMPEDANCE SELECTOR SWITCH
S1-1
S1-2
C517 0.01/125 ACG1023
RY501 ASR-512
FU1 10A/125
SHORT CIRCUIT FOR KUC TYPE
T501 ATT1015
FU3 6A/125V
FU4 6A/125V
AC SOCKET AKP-515
AC POWER CORD ADG1031
AC 120V/60Hz
SWITCHED UNSWITCHED
FUSE ASSEMBLY (P32)
FU5: 1.25A/125V
FU6: 1.25A/125V
FU5, FU6: AEK-120
T1 POWER TRANSFORMER
ATS1205: VSX-9500S/KUC
ATS1144: VSX-7500S/KUC
Note:
The parts specified as "VSX-9500S TYPE
are required for the VSX-9500S/KUC, SD/
The parts specified as "VSX-7500S TYPE
are required for the VSX-7500S/KUC, SD/

GRMS


VSX-9500S/SD/G
VSX-7500S/SD/G ONLY
CHANNEL STEP
FM De-emphasis
75μS ⟷ 50μS
10k/100k S4 9k/50k
ASM-004
FRONT CONTROL A ASSEMBLY
(AWZ2513:VSX-9500S/KUC,SD/G)
(AWZ2521:VSX-7500S/KUC,SD/G)
(P16-18)
F.L.
REMOTE CONTROL RECEIVER
FRONT CONTROL B ASSEMBLY
(AWZ2514 VSX-9500S KUC,SD/G)
(AWZ2522 VSX-7500S KUC,SD/G)
(P17-18)
METER AMP ASSEMBLY
(AWZ2515:VSX-9500S/KUC,SD/G)
(AWZ2523:VSX-7500S/KUC,SD/G)
(P18)
VSX-9500S TYPE ONLY
PRO LOGIC ASSEMBLY
(AWX1025)
(P46-48)
VOL-IND ASSEMBLY
(P31)
MOTOR-VOL ASSEMBLY
(AWZ2509 VSX-9500S KUC,SD/G)
(AWZ2519 VSX-7500S KUC,SD/G)
(P30-31)
HEADPHONE ASSEMBLY
(P31)
HEADPHONE
67mV/1W
Q5,Q6,Q9:2SC3180N
Q7,Q8,Q10:2SA1263N
REAR AMP ASSEMBLY
(AWZ2516 VSX-9500S/KUC,SD/G)
(AWZ2524 VSX-7500S/KUC,SD/G)
(P33)
FRONT SPEAKER
31.6V/8Ω
125W/8Ω
REAR SPEAKER
15.5V/8Ω
30W/8Ω
VSX-9500S/SD/G
VSX-7500S/SD/G
ONLY
RY501 ASR-512
FU1 6A/125V AEK-109
220V-240V ⟷ 110V-127V
S2
VOLTAGE SELECTOR SWITCH S2 AKX1004
T1 POWER TRANSFORMER
ATS1206:VSX-9500S/SD/G
ATS1145:VSX-7500S/SD/G
VOLTAGE SELECTOR SWITCH S3 AKX-507
120V-127V 110V 240V 220V
FU2 6A/125 AEK-109
AC SOCKET AKP-515
AC POWER CORD ADG1015
AC110V/120V-127V/220V/240V
50/60Hz
S1:AKX1004
SPEAKER IMPEDANCE SELECTOR SWITCH
S1-1
S1-2
C517 0.01/125 ACG1063
RY501 ASR-512
FU1 10A/125
SHORT CIRCUIT FOR KUC TYPE
T501 ATT1015
230V
115V
FU3 6A/125V
FU4 6A/125V
120V
0V
AC SOCKET AKP-515
AC POWER CORD ADG1031
AC 120V/60Hz
SWITCHED UNSWITCHED
FUSE ASSEMBLY
(P32)
FU5:1.25A/125V
FU6:1.25A/125V
FU5,FU6:AEK-120
T1 POWER TRANSFORMER
ATS1205:VSX-9500S/KUC
ATS1144:VSX-7500S/KUC
J9 J10 J1 J18 J17 CN18 C-2 CN10 J12 J19 J20 J13 CN54 CN12 CN19 CN20 CN13 J2 J54 J11 J7 J4 J51 J3 CN11 C-1 CN1 CN3 J16

Note:

The parts specified as "VSX-9500S TYPE" are required for the VSX-9500S/KUC,SD/G

The parts specified as "VSX-7500S TYPE" are required for the VSX-7500S/KUC,SD/G

1.RESISTORS:

Indicated in Ω,1/4W,1/8W,±5% tolerance unless otherwise noted
k:kΩ,M:MΩ,(F):±1%,(G):±2%,(K):±10%(M),±20% tolerance

2.CAPACITORS:

Indicated in capacity (μF)/voltage(V) unless otherwise noted p:pF
Indication without voltage is 50V except electrolytic capacitor.

3.VOLTAGE,CURRENT:

▭ :Signal voltage at 125W+125W(Front),30W+30W(Rear),
8ohm output(1kHz)

▭ :DC voltage (V) at no input signal
Value in ( ) is DC voltage at rated power.

⇦ mA:DC current at no input signal

4.OTHERS:

➡ :Signal route.

⊘ :Adjusting point.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore,when replacing,be sure to use parts of identical designation.

※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram,but the actual circuit may vary due to improvements in design.

5.SWITCH

S1:SPEAKER IMPEDANCE SELECTOR
8Ω or more⇔4Ω to less than 8Ω

S2:Voltage Selector (SD/G model only)
220~240V⇔110~127V

S3:Voltage Selector (SD/G model only)
110V,120~127V,220V,240V

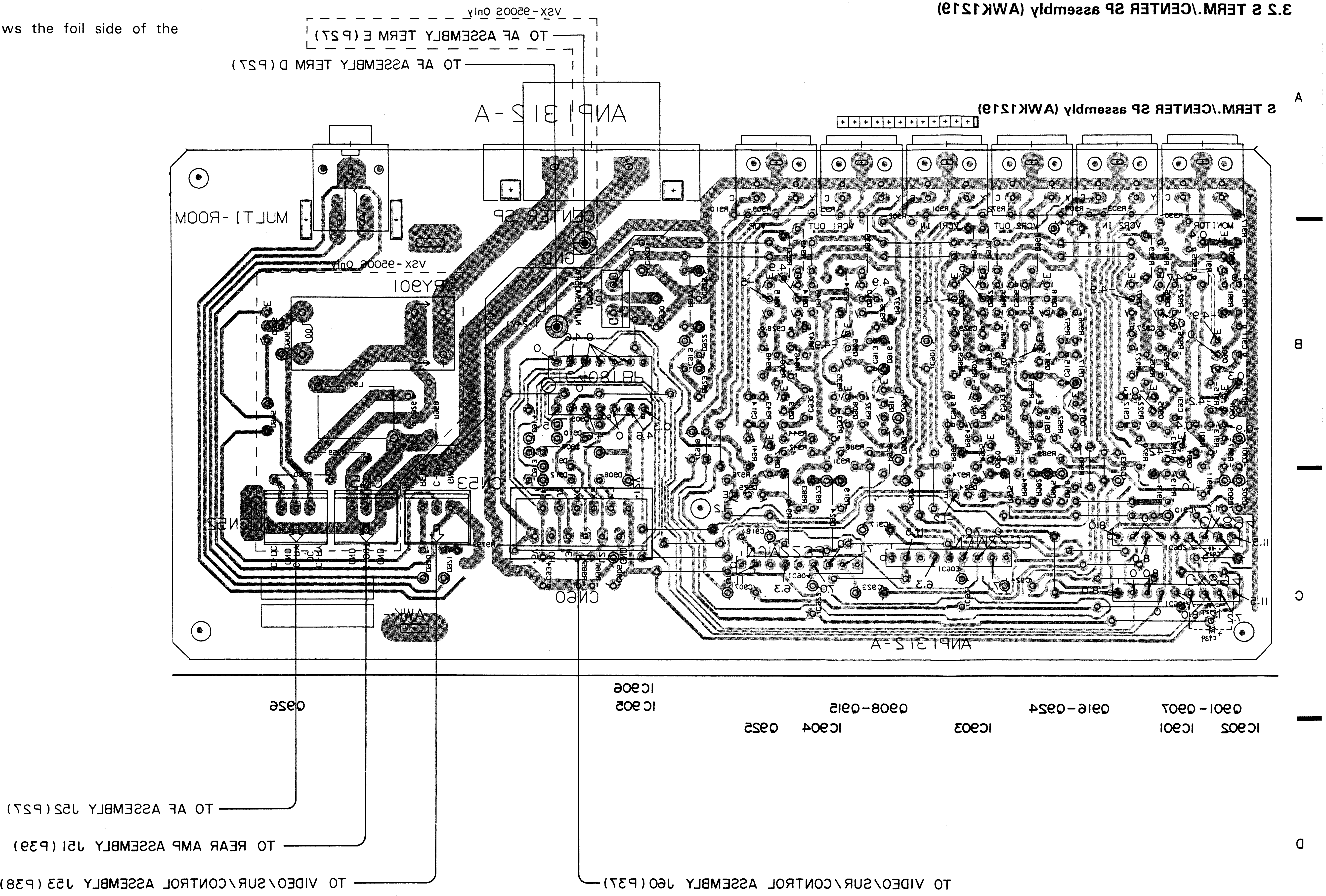
S4:CHANNEL STEP/FM DE-EMPHASIS (SD/G model only)
75μS⇔50μS
10kHz/100kHz⇔9kHz/50kHz

S801:TUNING UP
S802:TUNIG DOWN
S803:ST 1
S804:ST 2
S805:ST 3
S806:ST 4
S807:ST 5
S808:FM
S809:AM
S810:ST 6
S811:ST 7
S812:ST 8
S813:ST 9
S814:ST 10
S815:RETURN
S816:AUTO/MANUAL
S817:DIRECT
S818:FM MODE
S819:MEMORY
S820:MEMORY SCAN
S821:NAME
S822:HITS
S823:REAR UP
S824:REAR DOWN
S825:SIMULATED STEREO
S826:VIDEO SIGNAL SELECTOR
S827:VCR 1
S828:VCR 2
S829:VDP/CDV
S830:TV
S831:L
S832:R
S833:MUTE
S834:TAPE 2/DAT 2
S835:TAPE 1/DAT 1
S836:CD
S837:TUNER
S838:PHONO
S839:TREBLE UP
S840:TREBLE DOWN
S841:ACOUSTIC MEMORY
S842:ACOUSTIC SELECT
S843:DELAY TIME
S845:STADIUM
S846:SIMULATED
S847:BASS UP
S848:BASS DOWN
S849:VCR NOISE FILTER
S850:ENHANCER
S851:SURROUND OFF
S852:TV ANT
S853:POWER STANDBY
S854:SURROUND TEST TONE(VSX-9500S only)
S855:CENTER MODE (VSX-9500S only)
S856:VIDEO
S857:SP-A
S858:SP-B
S859:VCR 1 REC SELECTOR
S860:VIDEO ADAPTOR
S861:VCR 1 MODE
S862:VCR 1 REC ENHANCER
S863:SP-REAR
S864:VCR 3
S865:LINE
S866:CENTER UP (VSX-9500S only)
S867:CENTER DOWN (VSX-9500S only)

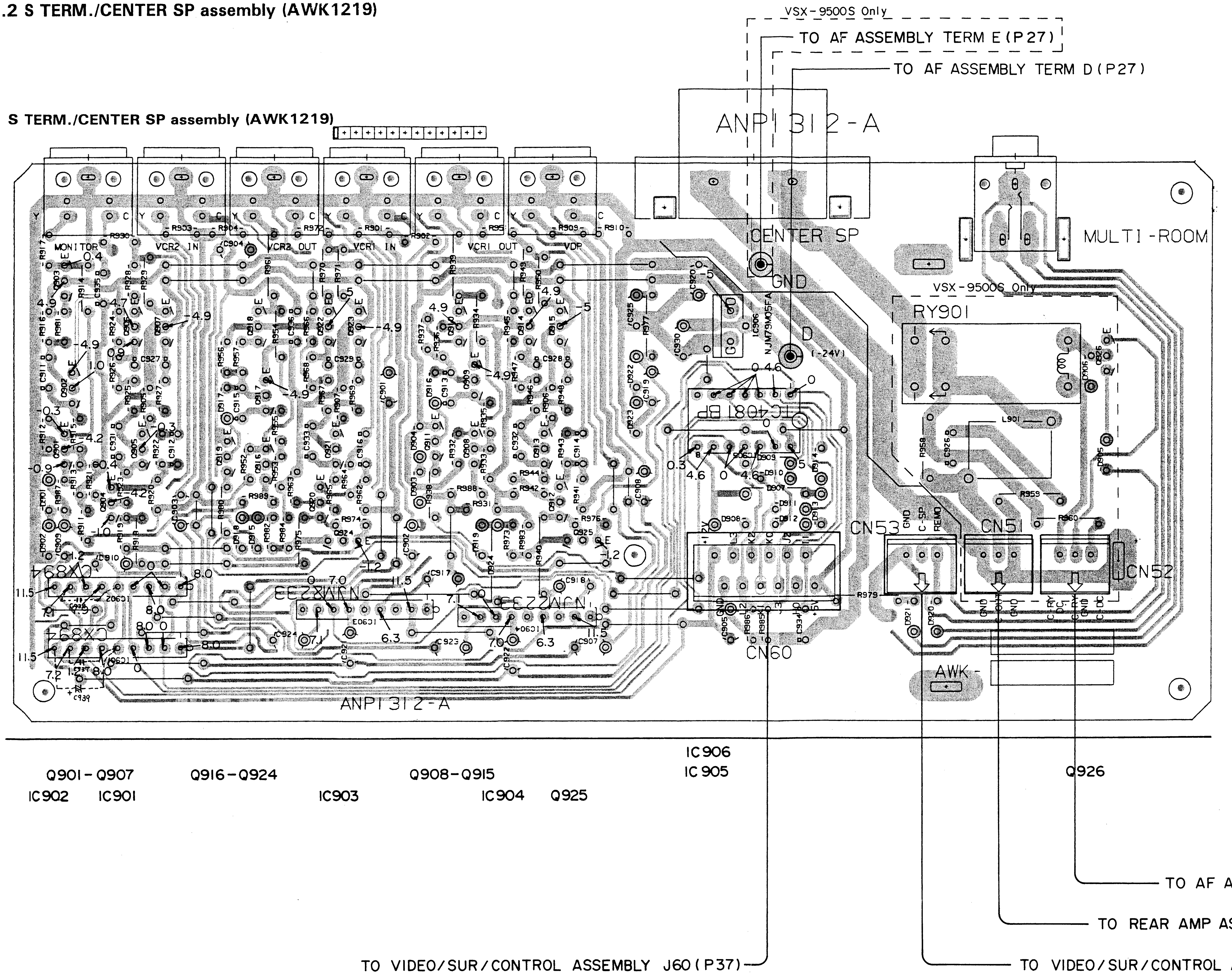
THE UNDERLINED INDICATES THE SWITCH POSITION

3.2 S TERM./CENTER SP assembly (AWK1219)

NOTE:
This picture shows the foil side of the printed circuit.

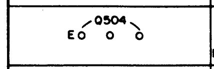
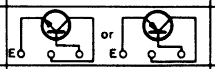
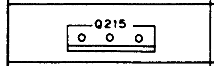
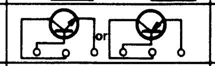
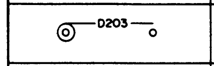
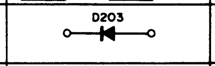
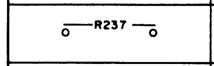
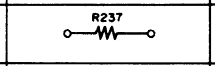
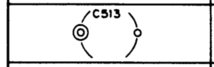
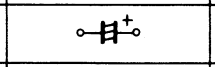
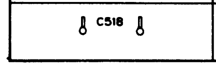
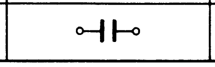

VSX-9500S Only
TO AF ASSEMBLY TERM E (P27)
TO AF ASSEMBLY TERM D (P27)
ANP1312-A
S TERM./CENTER SP assembly (AWK1219)
MULTI-ROOM
CENTER SP
GND
VSX-9500S Only
RY901
CN52
CN51
CN53
CN60
MONITOR
VCR2 IN
VCR2 OUT
VCR1 IN
VCR1 OUT
VDP
AWK-
Q926
IC906
IC905
Q908-Q915
Q916-Q924
Q901-Q907
IC904
Q925
IC903
IC901
IC902
TO AF ASSEMBLY J52 (P27)
TO REAR AMP ASSEMBLY J51 (P39)
TO VIDEO/SUR/CONTROL ASSEMBLY J53 (P38)
TO VIDEO/SUR/CONTROL ASSEMBLY J60 (P37)

3.2 S TERM./CENTER SP assembly (AWK1219)


S TERM./CENTER SP assembly (AWK1219)
VSX-9500S Only
TO AF ASSEMBLY TERM E (P27)
TO AF ASSEMBLY TERM D (P27)
ANP1312-A
CENTER SP
GND
D (-24V)
MULTI-ROOM
VSX-9500S Only
RY901
MONITOR
VCR2 IN
VCR2 OUT
VCR1 IN
VCR1 OUT
VDP
NJM79M05FA
TC4081BP
CN53
CN51
CN52
CN60
AWK
ANP1312-A
IC906
IC905
Q901-Q907
IC902
IC901
Q916-Q924
IC903
Q908-Q915
IC904
Q925
Q926
TO AF ASSEMBLY J52 (P27)
TO REAR AMP ASSEMBLY J51 (P39)
TO VIDEO/SUR/CONTROL ASSEMBLY J60 (P37)
TO VIDEO/SUR/CONTROL ASSEMBLY J53 (P38)

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

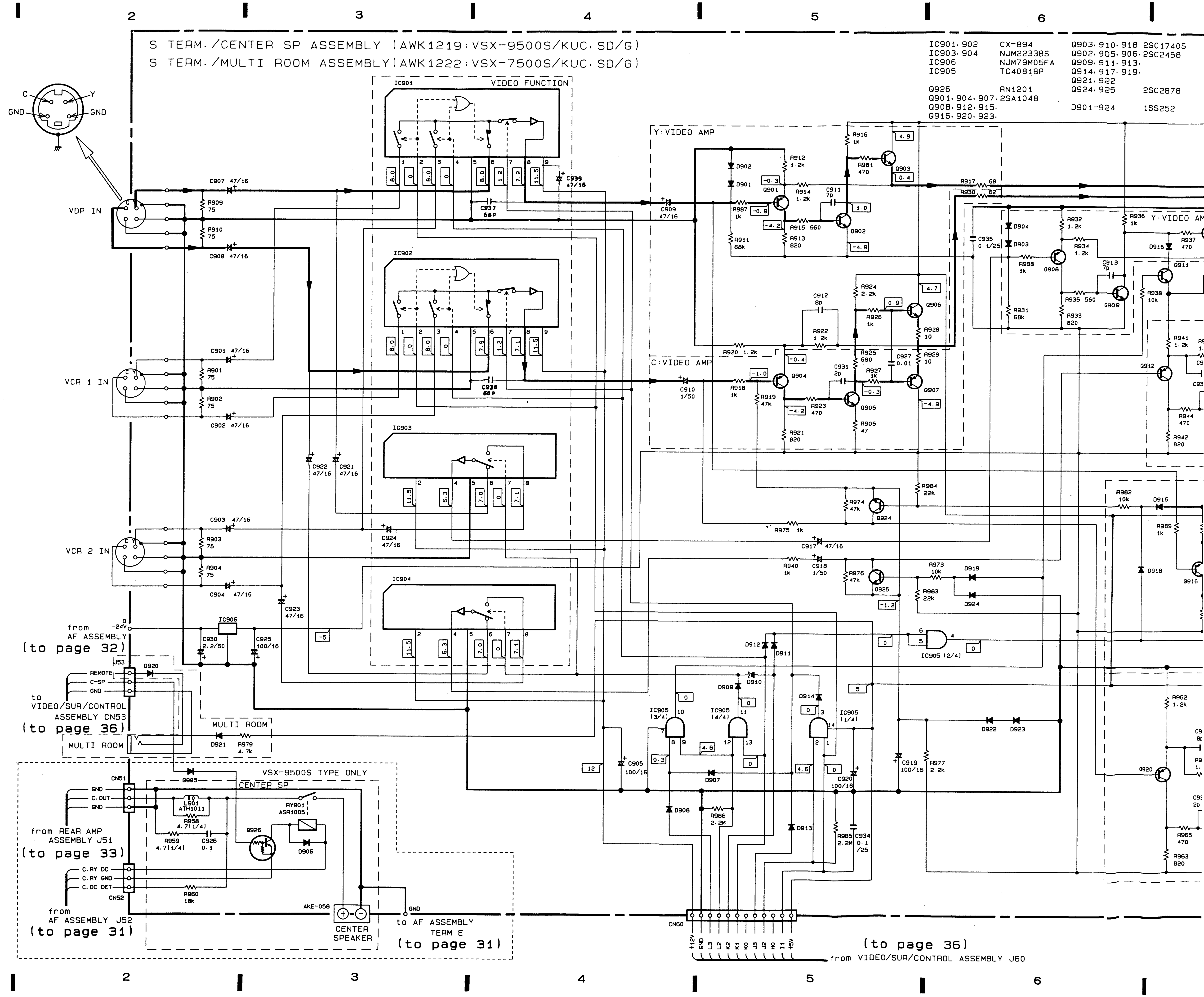
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

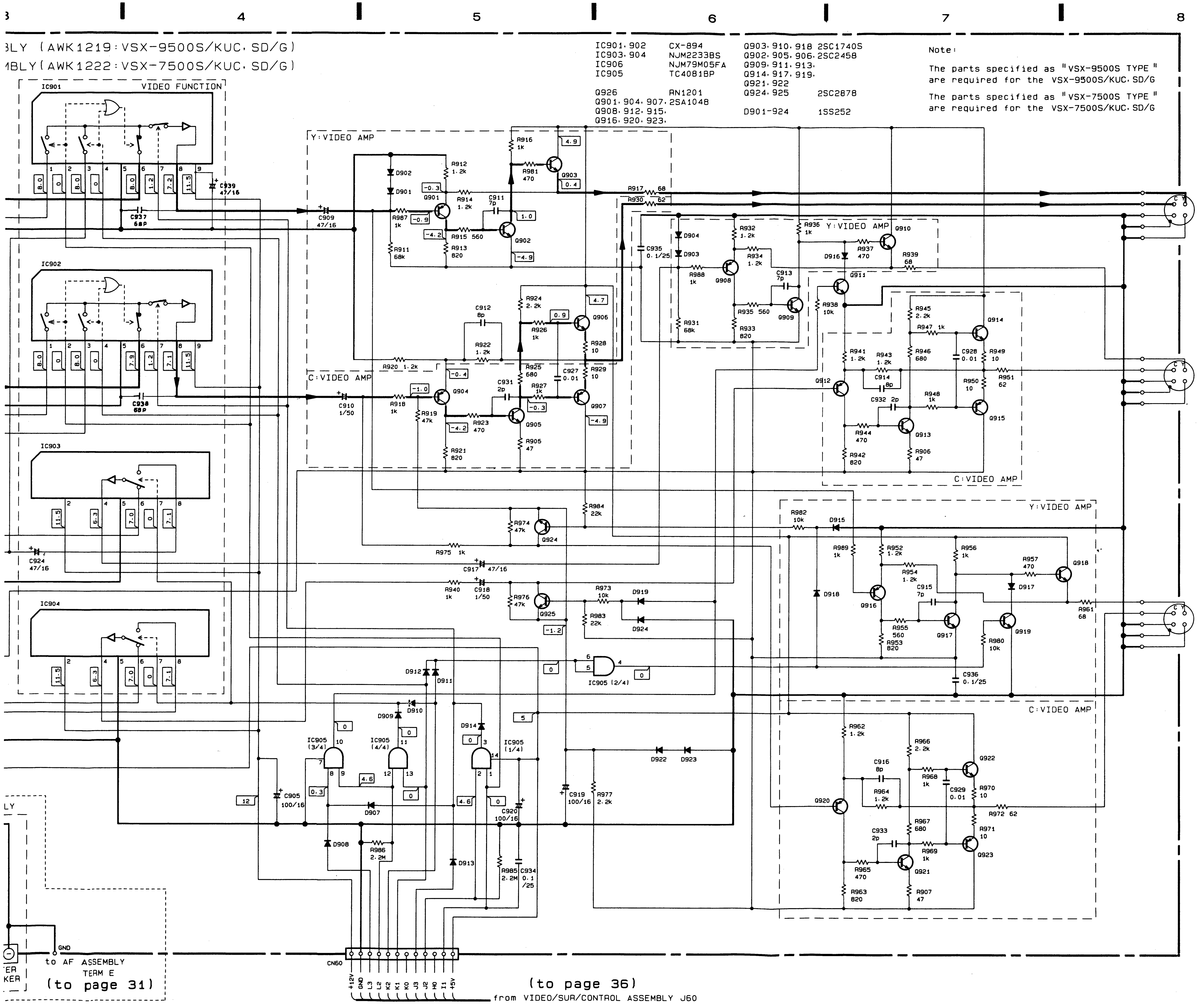
3. The capactor terminal marked with ◎ (double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

S TERM./CENTER SP ASSEMBLY (AWK1219: VSX-9500S/KUC, SD/G)
S TERM./MULTI ROOM ASSEMBLY (AWK1222: VSX-7500S/KUC, SD/G)

IC901, 902	CX-894	Q903, 910, 918	2SC1740S
IC903, 904	NJM2233BS	Q902, 905, 906,	2SC2458
IC906	NJM79M05FA	Q909, 911, 913,	
IC905	TC4081BP	Q914, 917, 919,	
		Q921, 922	
Q926	RN1201	Q924, 925	2SC2878
Q901, 904, 907,	2SA1048		
Q908, 912, 915,		D901-924	1SS252
Q916, 920, 923,			



1
2
3
4
5
6
A
B
C
D
C
Y
GND
GND
VDP IN
VCR 1 IN
VCR 2 IN
C907 47/16
C908 47/16
R909 75
R910 75
C901 47/16
C902 47/16
R901 75
R902 75
C903 47/16
C904 47/16
R903 75
R904 75
IC901
VIDEO FUNCTION
C939 47/16
C937 68P
IC902
C938 68P
IC903
IC904
C922 47/16
C921 47/16
C924 47/16
C923 47/16
from
AF ASSEMBLY
(to page 32)
-24V
IC906
C930 2.2/50
C925 100/16
-5
J53
D920
REMOTE
C-SP
GND
to
VIDEO/SUR/CONTROL
ASSEMBLY CN53
(to page 36)
MULTI ROOM
D921
R979 4.7k
MULTI ROOM
VSX-9500S TYPE ONLY
CN51
GND
C.OUT
GND
D905
CENTER SP
L901 ATH1011
R958 4.7(1/4)
RY901 ASR1005
R959 4.7(1/4)
C926 0.1
Q926
D906
from REAR AMP
ASSEMBLY J51
(to page 33)
C.RY DC
C.RY GND
C.DC DET
CN52
R960 18k
from
AF ASSEMBLY J52
(to page 31)
AKE-058
CENTER
SPEAKER
GND
to AF ASSEMBLY
TERM E
(to page 31)
Y:VIDEO AMP
C909 47/16
D902
D901
R912 1.2k
R914 1.2k
Q901
R987 1k
R911 68k
R913 820
R915 560
Q902
C911 7p
R916 1k
R981 470
Q903
R917 68
R930 62
C:VIDEO AMP
C910 1/50
R918 1k
R919 47k
Q904
R920 1.2k
C912 8p
R922 1.2k
R924 2.2k
R926 1k
Q906
R928 10
R925 680
C927 0.01
R929 10
C931 2p
R927 1k
Q905
Q907
R923 470
R921 820
R905 47
R984 22k
R974 47k
Q924
R975 1k
C917 47/16
R940 1k
C918 1/50
R976 47k
Q925
R973 10k
D919
R983 22k
D924
IC905 (2/4)
D912
D911
D910
D909
D914
IC905 (3/4)
IC905 (4/4)
IC905 (1/4)
D907
D908
R986 2.2M
D913
C905 100/16
C919 100/16
R977 2.2k
C920 100/16
R985 2.2M
C934 0.1 /25
D922
D923
CN60
+12V
GND
L3
L2
K2
K1
K0
J3
J2
M0
I1
+5V
(to page 36)
from VIDEO/SUR/CONTROL ASSEMBLY J60
C935 0.1/25
D904
D903
R988 1k
Q908
R932 1.2k
R934 1.2k
R935 560
C913 7p
Q909
R931 68k
R933 820
R936 1k
Y:VIDEO AMP
R937 470
D916
Q911
R938 10k
R941 1.2k
Q912
R944 470
R942 820
R982 10k
D915
R989 1k
D918
Q916
R962 1.2k
Q920
R965 470
R963 820


3LY (AWK1219:VSX-9500S/KUC,SD/G)
1BLY (AWK1222:VSX-7500S/KUC,SD/G)
IC901
VIDEO FUNCTION
IC902
IC903
IC904
Y:VIDEO AMP
C:VIDEO AMP
Y:VIDEO AMP
C:VIDEO AMP
Y:VIDEO AMP
C:VIDEO AMP
MONITOR OUT
VCR 1 OUT
VCR 2 OUT
IC905 (2/4)
IC905 (3/4)
IC905 (4/4)
IC905 (1/4)
CN60
+12V
GND
L3
L2
K2
K1
K0
J3
J2
H0
I1
+5V
to AF ASSEMBLY TERM E
(to page 31)
(to page 36)
from VIDEO/SUR/CONTROL ASSEMBLY J60
GND
3
4
5
6
7
8
A
B
C
D
9

IC901, 902	CX-894	Q903, 910, 918	2SC1740S
IC903, 904	NJM2233BS	Q902, 905, 906,	2SC2458
IC906	NJM79M05FA	Q909, 911, 913,	
IC905	TC4081BP	Q914, 917, 919,	
		Q921, 922	
Q926	RN1201	Q924, 925	2SC2878
Q901, 904, 907,	2SA1048		
Q908, 912, 915,		D901-924	1SS252
Q916, 920, 923,			

Note:

The parts specified as "VSX-9500S TYPE" are required for the VSX-9500S/KUC, SD/G

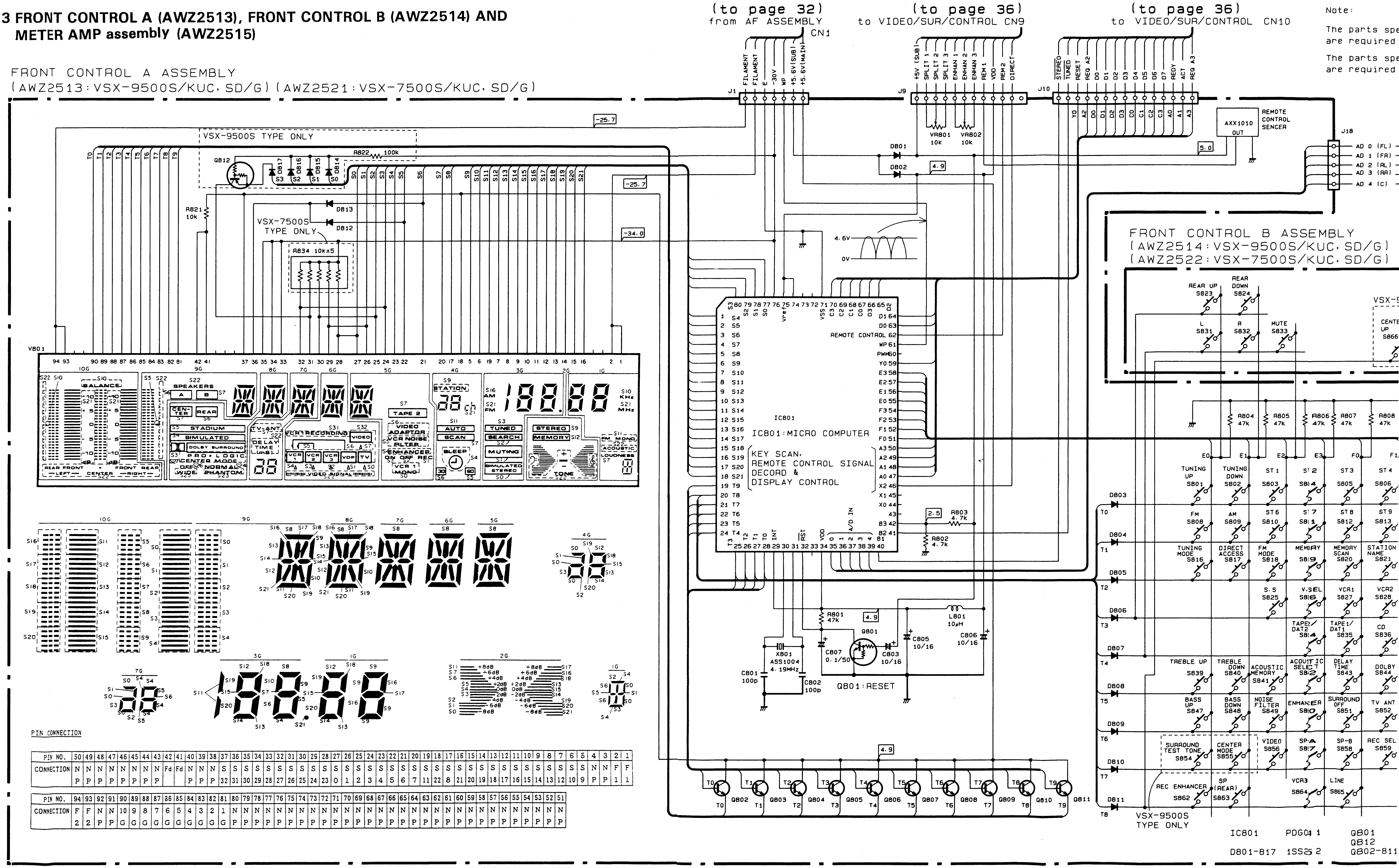
The parts specified as "VSX-7500S TYPE" are required for the VSX-7500S/KUC, SD/G

3.3 FRONT CONTROL A (AWZ2513), FRONT CONTROL B (AWZ2514) AND METER AMP assembly (AWZ2515)

Note:

The parts spe
are required

The parts spe
are required


FRONT CONTROL A ASSEMBLY
(AWZ2513:VSX-9500S/KUC, SD/G) (AWZ2521:VSX-7500S/KUC, SD/G)
(to page 32)
from AF ASSEMBLY
CN1
(to page 36)
to VIDEO/SUR/CONTROL CN9
(to page 36)
to VIDEO/SUR/CONTROL CN10
J1
FILAMENT
FILAMENT
E
-30V
WP
+5.6V(SUB)
+5.6V(MAIN)
J9
+5V (SUB)
SPLIT 1
SPLIT 2
SPLIT 3
ENHAN 1
ENHAN 2
ENHAN 3
REM 1
VDD
REM 2
DIRECT
J10
STEREO
TUNED
RESET
REQ A2
D0
D1
D2
D3
D4
D5
D6
D7
REDY
ACT
REQ A3
VR801 10k
VR802 10k
AXX1010
OUT
REMOTE CONTROL SENCER
J18
AD 0 (FL)
AD 1 (FR)
AD 2 (RL)
AD 3 (RR)
AD 4 (C)
VSX-9500S TYPE ONLY
Q812
R822 100k
D817 D816 D815 D814
R821 10k
VSX-7500S TYPE ONLY
D813
D812
R834 10kx5
D801
D802
-25.7
-34.0
5.0
4.9
4.6V
0V
V801
IC801
IC801:MICRO COMPUTER
KEY SCAN,
REMOTE CONTROL SIGNAL
DECORD &
DISPLAY CONTROL
REMOTE CONTROL
R801 47k
R802 4.7k
R803 4.7k
2.5
X801
ASS1004
4.19MHz
C801 100p
C802 100p
C807 0.1/50
Q801
C803 10/16
C805 10/16
L801 10μH
C806 10/16
Q801:RESET
Q802 Q803 Q804 Q805 Q806 Q807 Q808 Q809 Q810 Q811
T0 T1 T2 T3 T4 T5 T6 T7 T8 T9
FRONT CONTROL B ASSEMBLY
(AWZ2514:VSX-9500S/KUC, SD/G)
(AWZ2522:VSX-7500S/KUC, SD/G)
REAR UP S823
REAR DOWN S824
L S831
R S832
MUTE S833
R804 47k
R805 47k
R806 47k
R807 47k
R808 47k
TUNING UP S801
TUNING DOWN S802
ST 1 S803
ST 2 S804
ST 3 S805
ST 4 S806
FM S808
AM S809
ST 6 S810
ST 7 S811
ST 8 S812
ST 9 S813
TUNING MODE S816
DIRECT ACCESS S817
FM MODE S818
MEMORY S819
MEMORY SCAN S820
STATION NAME S821
S.S S825
V.SEL S826
VCR1 S827
VCR2 S828
TAPE2/DAT2 S834
TAPE1/DAT1 S835
CD S836
TREBLE UP S839
TREBLE DOWN S840
ACOUSTIC MEMORY S841
ACOUSTIC SELECT S842
DELAY TIME S843
DOLBY S844
BASS UP S847
BASS DOWN S848
NOISE FILTER S849
ENHANCER S850
SURROUND OFF S851
TV ANT S852
SURROUND TEST TONE S854
CENTER MODE S855
VIDEO S856
SP-A S857
SP-B S858
REC SEL S859
REC ENHANCER S862
SP (REAR) S863
VCR3 S864
LINE S865
D803 D804 D805 D806 D807 D808 D809 D810 D811
VSX-9500S TYPE ONLY
IC801 PDG041
D801-817 1SS252
Q801
Q812
Q802-811
SPEAKERS
BALANCE
STADIUM
SIMULATED
DOLBY SURROUND
PRO LOGIC
CENTER MODE
NORMAL
WIDE
PHANTOM
TV ANT
DELAY TIME
VCR RECORDING
VIDEO
TAPE 2
VIDEO ADAPTOR
VCR NOISE FILTER
ENHANCER
VIDEO SIGNAL
STATION
AUTO
SCAN
SLEEP
TUNED
SEARCH
MUTING
SIMULATED STEREO
STEREO
MEMORY
TONE
FM MONO
ACOUSTIC
LOUDNESS
kHz
MHz
REAR FRONT FRONT REAR
LEFT CENTER RIGHT
10G 9G 8G 7G 6G 5G 4G 3G 2G 1G
+8dB +6dB +4dB +2dB 0dB -2dB -4dB -6dB -8dB

PIN CONNECTION

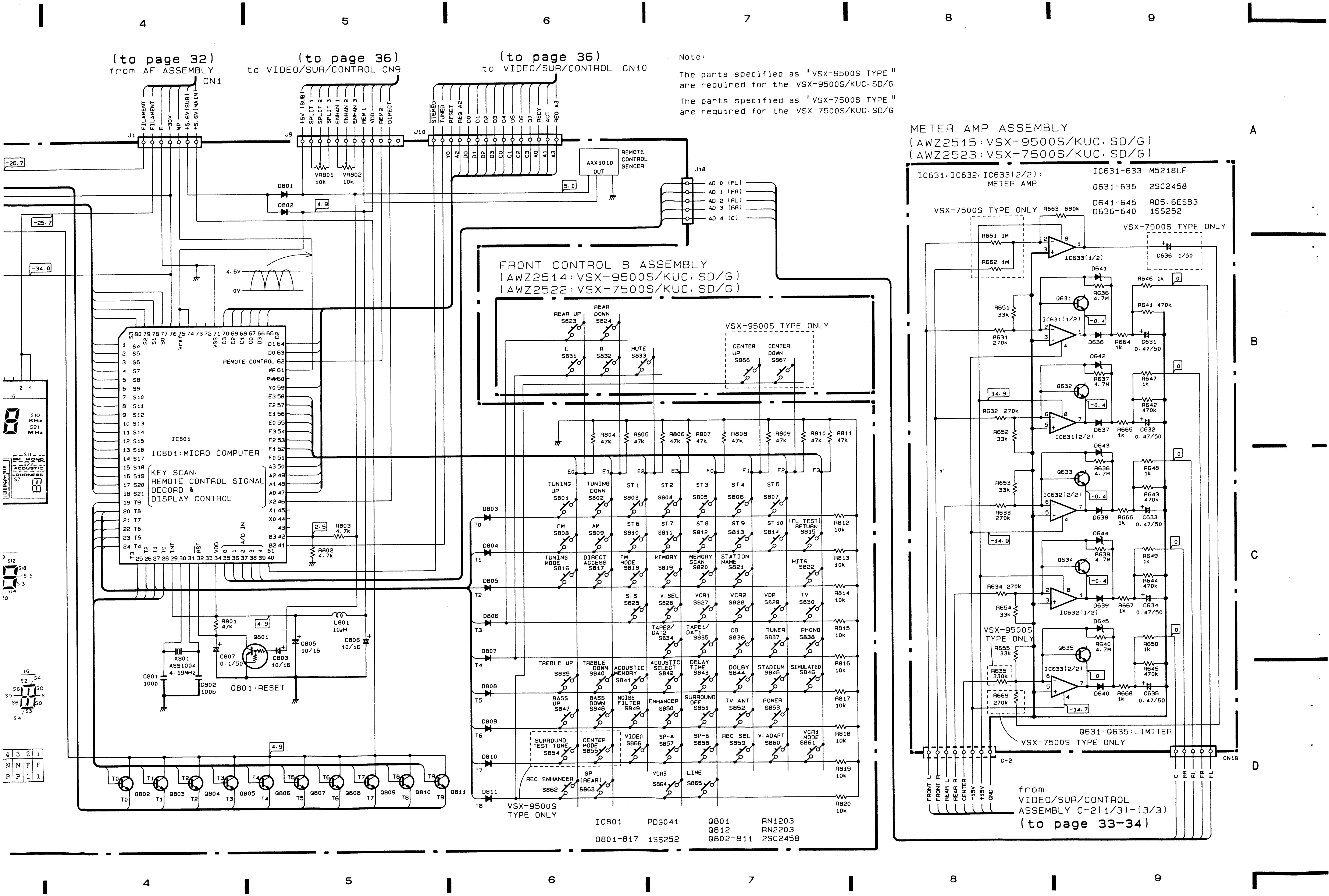
PIN NO.	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	N P	N P	N P	N P	N P	N P	N P	N P	Fd	Fd	N P	N P	N P	S 32	S 31	S 30	S 29	S 28	S 27	S 26	S 25	S 24	S 23	S 0	S 1	S 2	S 3	S 4	S 5	S 6	S 7	S 11	S 22	S 8	S 21	S 20	S 19	S 18	S 17	S 16	S 15	S 14	S 13	S 12	S 10	S 9	N P	N P	F 1	F 1

PIN NO.	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51
CONNECTION	F 2	F 2	N P	N P	10 G	9 G	8 G	7 G	6 G	5 G	4 G	3 G	2 G	1 G	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P

Note:

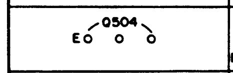
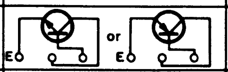
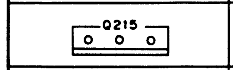
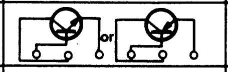
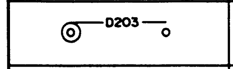
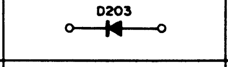
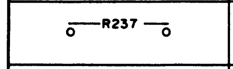
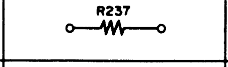
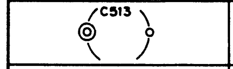
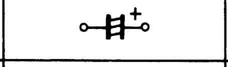
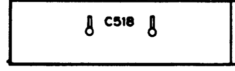
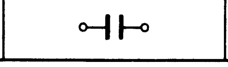
The parts specified as "VSX-9500S TYPE" are required for the VSX-9500S/KUC, SD/G

The parts specified as "VSX-7500S TYPE" are required for the VSX-7500S/KUC, SD/G


4
5
6
7
8
9
A
B
C
D
(to page 32)
from AF ASSEMBLY
CN1
(to page 36)
to VIDEO/SUR/CONTROL CN9
(to page 36)
to VIDEO/SUR/CONTROL CN10
FILAMENT
FILAMENT
E
-30V
WP
+5.6V(SUB)
+5.6V(MAIN)
+5V(SUB)
SPLIT 1
SPLIT 2
SPLIT 3
ENHAN 1
ENHAN 2
ENHAN 3
REM 1
VDD
REM 2
DIRECT
STEREO
TUNED
RESET
REQ A2
D0
D1
D2
D3
D4
D5
D6
D7
REDY
ACT
REQ A3
J1
J9
J10
J18
VR801 10k
VR802 10k
AXX1010
OUT
REMOTE CONTROL SENCER
5.0
4.9
D801
D802
-25.7
-34.0
4.6V
0V
AD 0 (FL)
AD 1 (FR)
AD 2 (RL)
AD 3 (RR)
AD 4 (C)
IC801
IC801: MICRO COMPUTER
KEY SCAN,
REMOTE CONTROL SIGNAL
DECORD &
DISPLAY CONTROL
REMOTE CONTROL
R801 47k
R802 4.7k
R803 4.7k
2.5
Q801
C807 0.1/50
C803 10/16
C805 10/16
C806 10/16
L801 10μH
X801 ASS1004 4.19MHz
C801 100p
C802 100p
Q801: RESET
Q802
Q803
Q804
Q805
Q806
Q807
Q808
Q809
Q810
Q811
T0
T1
T2
T3
T4
T5
T6
T7
T8
T9
FRONT CONTROL B ASSEMBLY
(AWZ2514: VSX-9500S/KUC, SD/G)
(AWZ2522: VSX-7500S/KUC, SD/G)
REAR UP S823
REAR DOWN S824
L S831
R S832
MUTE S833
VSX-9500S TYPE ONLY
CENTER UP S866
CENTER DOWN S867
R804 47k
R805 47k
R806 47k
R807 47k
R808 47k
R809 47k
R810 47k
R811 47k
E0
E1
E2
E3
F0
F1
F2
F3
TUNING UP S801
TUNING DOWN S802
ST 1 S803
ST 2 S804
ST 3 S805
ST 4 S806
ST 5 S807
FM S808
AM S809
ST 6 S810
ST 7 S811
ST 8 S812
ST 9 S813
ST 10 S814
(FL TEST) RETURN S815
TUNING MODE S816
DIRECT ACCESS S817
FM MODE S818
MEMORY S819
MEMORY SCAN S820
STATION NAME S821
HITS S822
S.S S825
V.SEL S826
VCR1 S827
VCR2 S828
VDP S829
TV S830
TAPE2/DAT2 S834
TAPE1/DAT1 S835
CD S836
TUNER S837
PHONO S838
TREBLE UP S839
TREBLE DOWN S840
ACOUSTIC MEMORY S841
ACOUSTIC SELECT S842
DELAY TIME S843
DOLBY S844
STADIUM S845
SIMULATED S846
BASS UP S847
BASS DOWN S848
NOISE FILTER S849
ENHANCER S850
SURROUND OFF S851
TV ANT S852
POWER S853
SURROUND TEST TONE S854
CENTER MODE S855
VIDEO S856
SP-A S857
SP-B S858
REC SEL S859
V.ADAPT S860
VCR1 MODE S861
REC ENHANCER S862
SP (REAR) S863
VCR3 S864
LINE S865
VSX-9500S TYPE ONLY
D803
D804
D805
D806
D807
D808
D809
D810
D811
R812 10k
R813 10k
R814 10k
R815 10k
R816 10k
R817 10k
R818 10k
R819 10k
R820 10k
IC801 PDG041
D801-817 1SS252
Q801 RN1203
Q812 RN2203
Q802-811 2SC2458
METER AMP ASSEMBLY
(AWZ2515: VSX-9500S/KUC, SD/G)
(AWZ2523: VSX-7500S/KUC, SD/G)
IC631, IC632, IC633(2/2): METER AMP
IC631-633 M5218LF
Q631-635 2SC2458
D641-645 RD5.6ESB3
D636-640 1SS252
VSX-7500S TYPE ONLY
R663 680k
R661 1M
R662 1M
IC633(1/2)
VSX-7500S TYPE ONLY
C636 1/50
D641
R646 1k
R636 4.7M
R641 470k
Q631
R651 33k
IC631(1/2)
-0.4
R631 270k
D636
R664 1k
C631 0.47/50
D642
R637 4.7M
R647 1k
Q632
14.9
R632 270k
R642 470k
R652 33k
IC631(2/2)
D637
R665 1k
C632 0.47/50
D643
R638 4.7M
R648 1k
Q633
R653 33k
IC632(2/2)
R643 470k
R633 270k
D638
R666 1k
C633 0.47/50
-14.9
D644
R639 4.7M
R649 1k
Q634
R644 470k
R634 270k
R654 33k
IC632(1/2)
D639
R667 1k
C634 0.47/50
D645
VSX-9500S TYPE ONLY
R655 33k
R640 4.7M
R650 1k
Q635
R635 330k
IC633(2/2)
R645 470k
R669 270k
D640
R668 1k
C635 0.47/50
-14.7
Q631-Q635: LIMITER
VSX-7500S TYPE ONLY
C-2
CN18
FRONT L
FRONT R
REAR L
REAR R
CENTER
-15V
+15V
GND
C
RR
RL
FR
FL
from
VIDEO/SUR/CONTROL
ASSEMBLY C-2(1/3)-(3/3)
(to page 33-34)

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

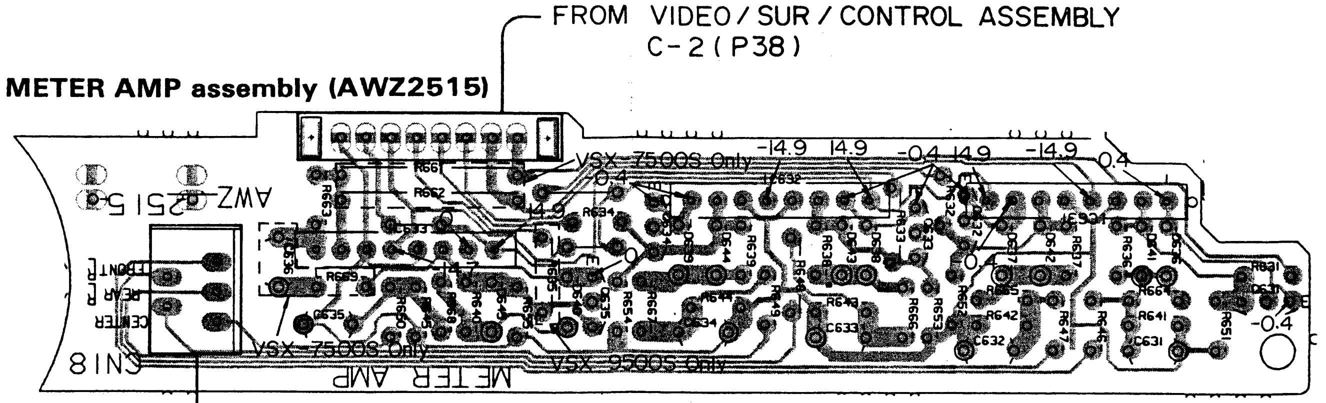
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

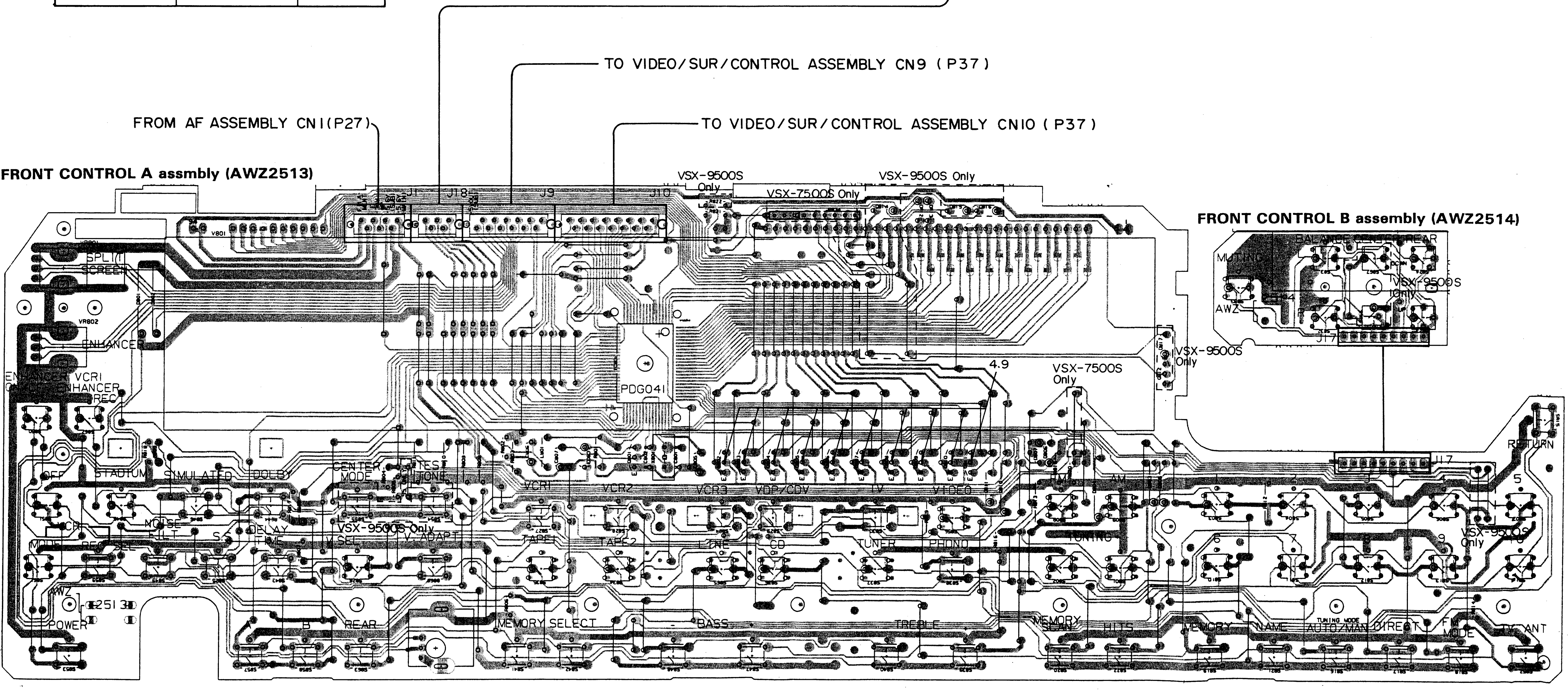
3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

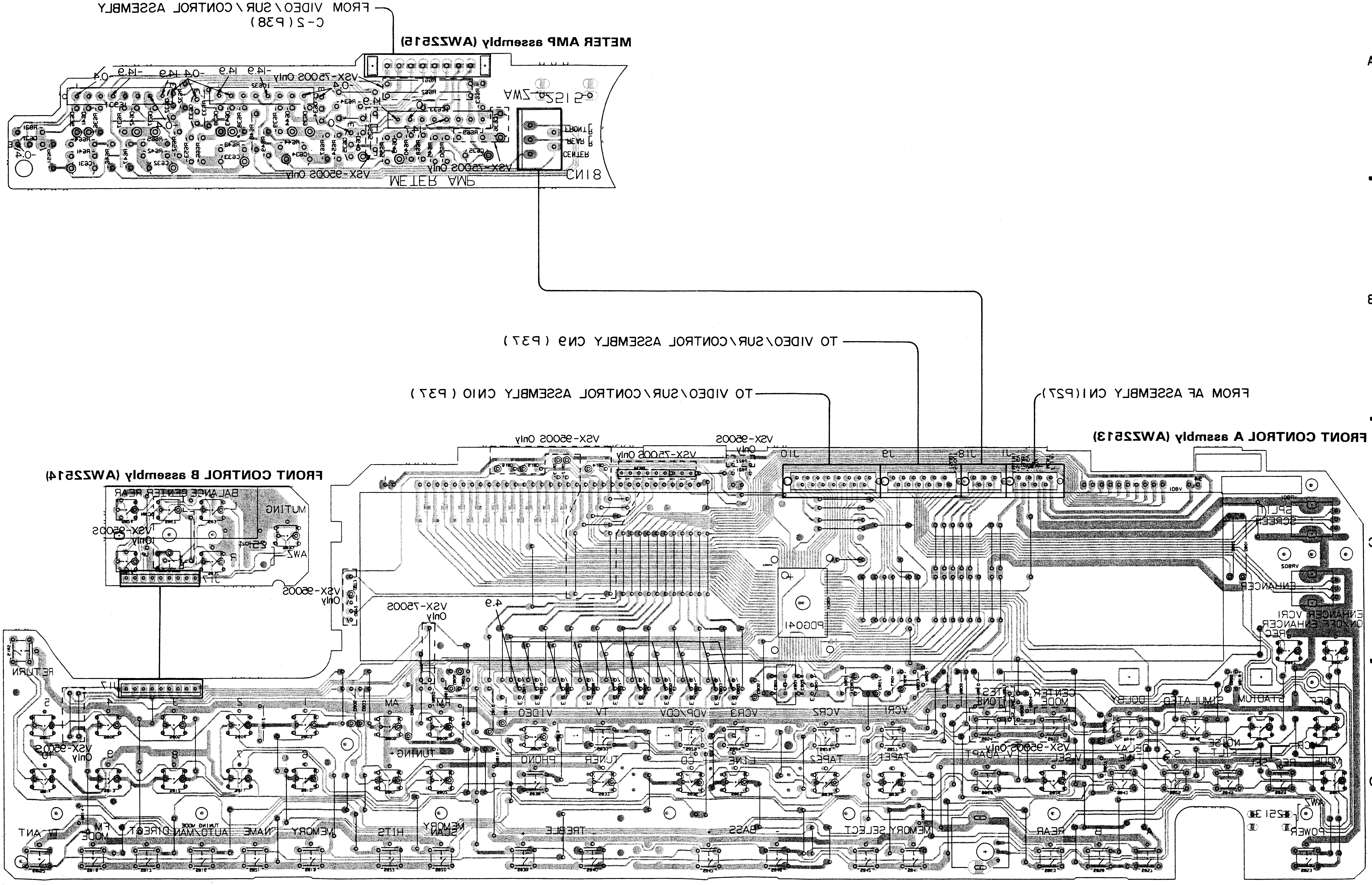
METER AMP assembly (AWZ2515)


FROM VIDEO / SUR / CONTROL ASSEMBLY C-2 (P38)
VSX-7500S Only
VSX-9500S Only
METER AMP
AWZ-2515
CN18
FRONT
REAR
CENTER
-14.9
14.9
-0.4
0.4

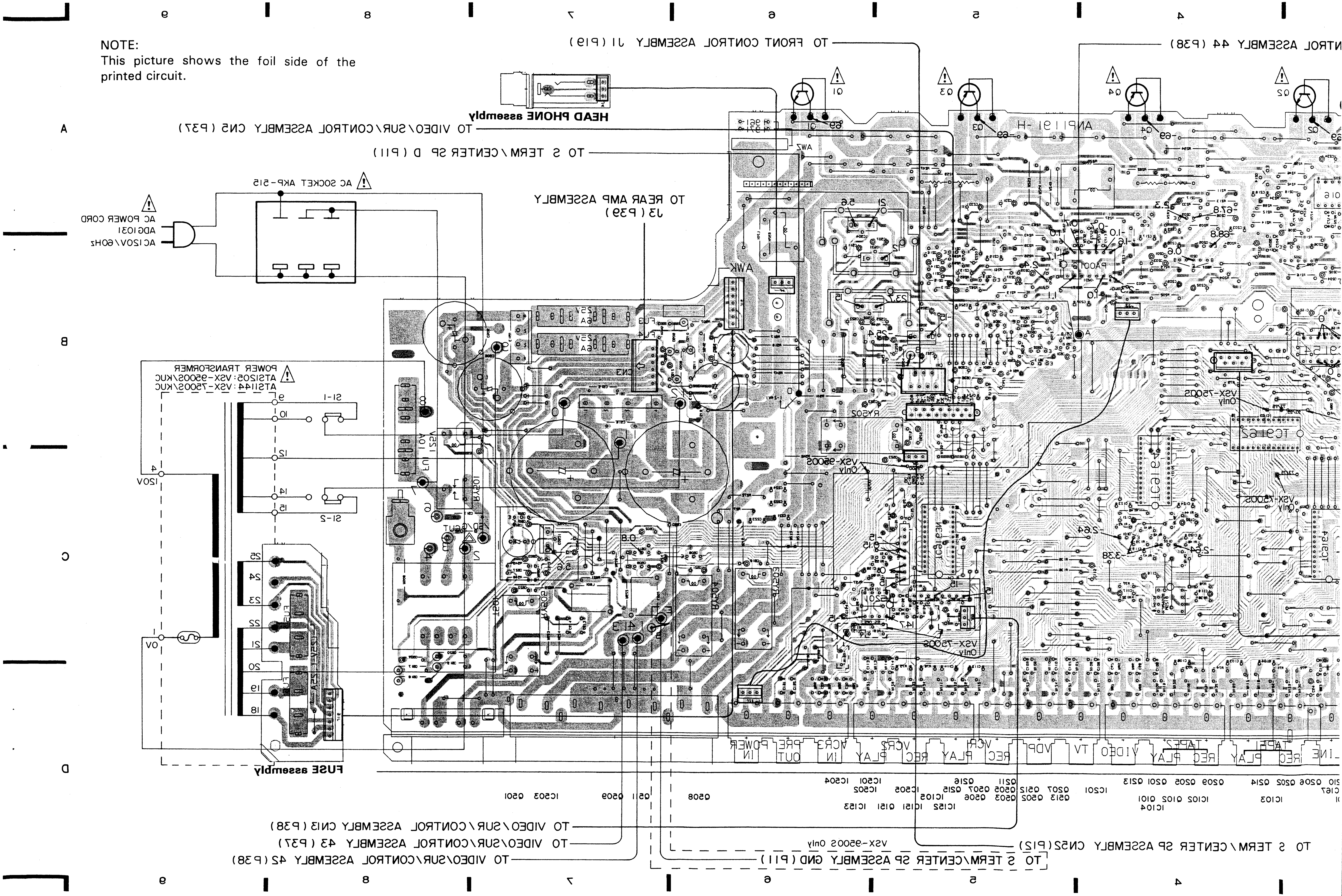
FRONT CONTROL A assmbly (AWZ2513)

FRONT CONTROL B assembly (AWZ2514)

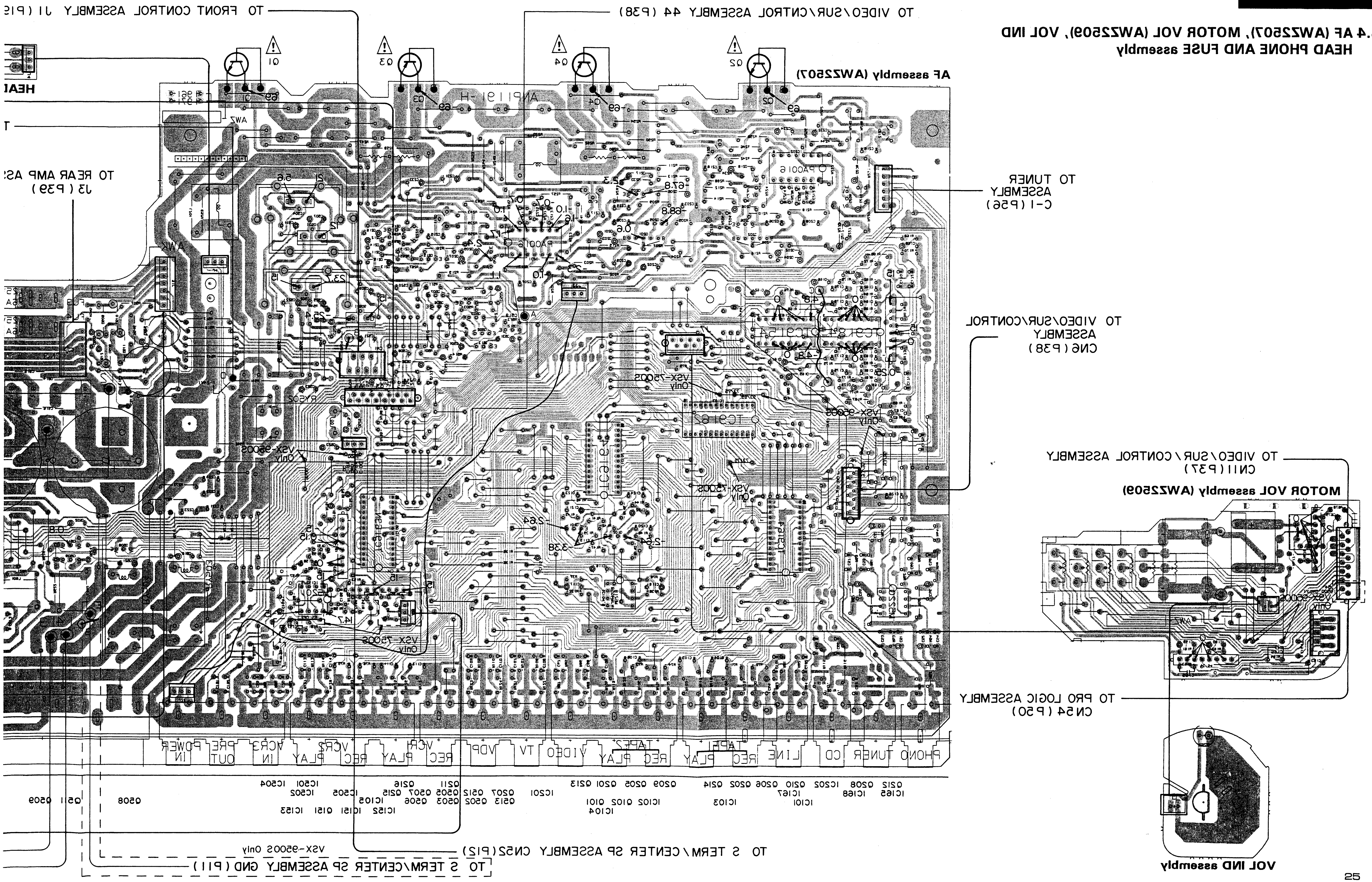

TO VIDEO/SUR/CONTROL ASSEMBLY CN9 (P37)
FROM AF ASSEMBLY CN1(P27)
TO VIDEO/SUR/CONTROL ASSEMBLY CN10 (P37)
J1
J18
J9
J10
J17
VSX-9500S Only
VSX-7500S Only
PDG041
4.9
SPLIT SCREEN
ENHANCER
VCR1 ENHANCER REC
OFF
STADIUM
SIMULATED
DOLBY
CENTER MODE
TEST TONE
NOISE FILT
DELAY TIME
V.SEL
V. ADAPT
TAPE1
TAPE2
LINE
CD
TUNER
PHONO
VCR1
VCR2
VCR3
VDP/CDV
TV
VIDEO
FM
AM
TUNING
MODE
REC SEL
POWER
AWZ 2513
REAR
MEMORY SELECT
BASS
TREBLE
MEMORY SCAN
HITS
MEMORY
NAME
TUNING MODE AUTO/MAN
DIRECT
FM MODE
ANT
RETURN
MUTING
BALANCE
AWZ


FROM VIDEO/SUR/CONTROL ASSEMBLY
C-2 (P38)
METER AMP assembly (AWZ2515)
METER AMP
CN18
FRONT
REAR
CENTER
VSX-7500S Only
VSX-9500S Only
TO VIDEO/SUR/CONTROL ASSEMBLY CN9 (P37)
TO VIDEO/SUR/CONTROL ASSEMBLY CN10 (P37)
FROM AF ASSEMBLY CN1(P27)
FRONT CONTROL A assembly (AWZ2513)
FRONT CONTROL B assembly (AWZ2514)
J10
J9
J18
J1
J17
PDG041
BALANCE CENTER REAR
MUTING
RETURN
VIDEO
TV
VDP/CDV
VCR3
VCR2
VCR1
PHONO
TUNER
CD
LINE
TAPE2
TAPE1
TUNING
FM
AM
SPLIT
SCREEN
ENHANCER
ENHANCER VCR1
ON/OFF ENHANCER
REC
CENTER MODE
TEST TONE
DOLBY
SIMULATED
STADIUM
OFF
DELAY
S.S
NOISE
MODE
REC SEL
V.SEL
ADAPT
ANT
FM MODE
DIRECT
AUTO/MAN
NAME
MEMORY
HITS
MEMORY SCAN
TREBLE
BASS
MEMORY SELECT
REAR
POWER
4.9
A
B
C
D
1
2
3
4
5
6

NOTE:
This picture shows the foil side of the printed circuit.


TO FRONT CONTROL ASSEMBLY J1 (P19)
NTROL ASSEMBLY 44 (P38)
HEAD PHONE assembly
TO VIDEO/SUR/CONTROL ASSEMBLY CN5 (P37)
TO S TERM/CENTER SP D (P11)
AC SOCKET AKP-515
AC POWER CORD
ADG1031
AC120V/60Hz
TO REAR AMP ASSEMBLY
J3 (P39)
POWER TRANSFORMER
ATS1205: VSX-9500S/KUC
ATS1144: VSX-7500S/KUC
S1-1
S1-2
120V
0V
FUSE assembly
Q1
Q2
Q3
Q4
ANP1191-H
AWK
VSX-9500S Only
VSX-7500S Only
VSX-7500S Only
VSX-7500S Only
POWER IN
PRE OUT
VCR3 IN
VCR2 PLAY REC
VCR1 PLAY REC
VDP
TV
VIDEO
TAPE2 PLAY REC
TAPE1 PLAY REC
LINE
TO VIDEO/SUR/CONTROL ASSEMBLY CN13 (P38)
TO VIDEO/SUR/CONTROL ASSEMBLY 43 (P37)
TO VIDEO/SUR/CONTROL ASSEMBLY 42 (P38)
VSX-9500S Only
TO S TERM/CENTER SP ASSEMBLY CN52 (P12)
TO S TERM/CENTER SP ASSEMBLY GND (P11)
A
B
C
D
9
8
7
6
5
4

3.4 AF (AWZ2507), MOTOR VOL (AWZ2509), VOL IND HEAD PHONE AND FUSE assembly


AF assembly (AWZ2507)
MOTOR VOL assembly (AWZ2509)
VOL IND assembly
TO FRONT CONTROL ASSEMBLY J1 (P1
TO VIDEO/SUR/CNTROL ASSEMBLY 44 (P38)
TO REAR AMP AS
J3 (P39)
HEA
TO TUNER ASSEMBLY C-1 (P56)
TO VIDEO/SUR/CONTROL ASSEMBLY CN6 (P38)
TO VIDEO/SUR/CONTROL ASSEMBLY CN11 (P37)
TO PRO LOGIC ASSEMBLY CN54 (P50)
TO S TERM/CENTER SP ASSEMBLY CN52 (P12)
TO S TERM/CENTER SP ASSEMBLY GND (P11)
VSX-9500S Only
VSX-7500S Only
Q1
Q2
Q3
Q4
ANP1191-H
PA001G
IC9154
IC9162
POWER IN
PRE OUT
VCR3 IN
VCR2 PLAY
VCR2 REC
VCR1 PLAY
VCR1 REC
VDP
TV
VIDEO
TAPE2 PLAY
TAPE2 REC
TAPE1 PLAY
TAPE1 REC
LINE
CD
TUNER
PHONO
6
5
4
3
2
1
A
B
C
D

3.4 AF (AWZ2507), MOTOR VOL (AWZ2509), VOL IND HEAD PHONE AND FUSE assembly

NOTE

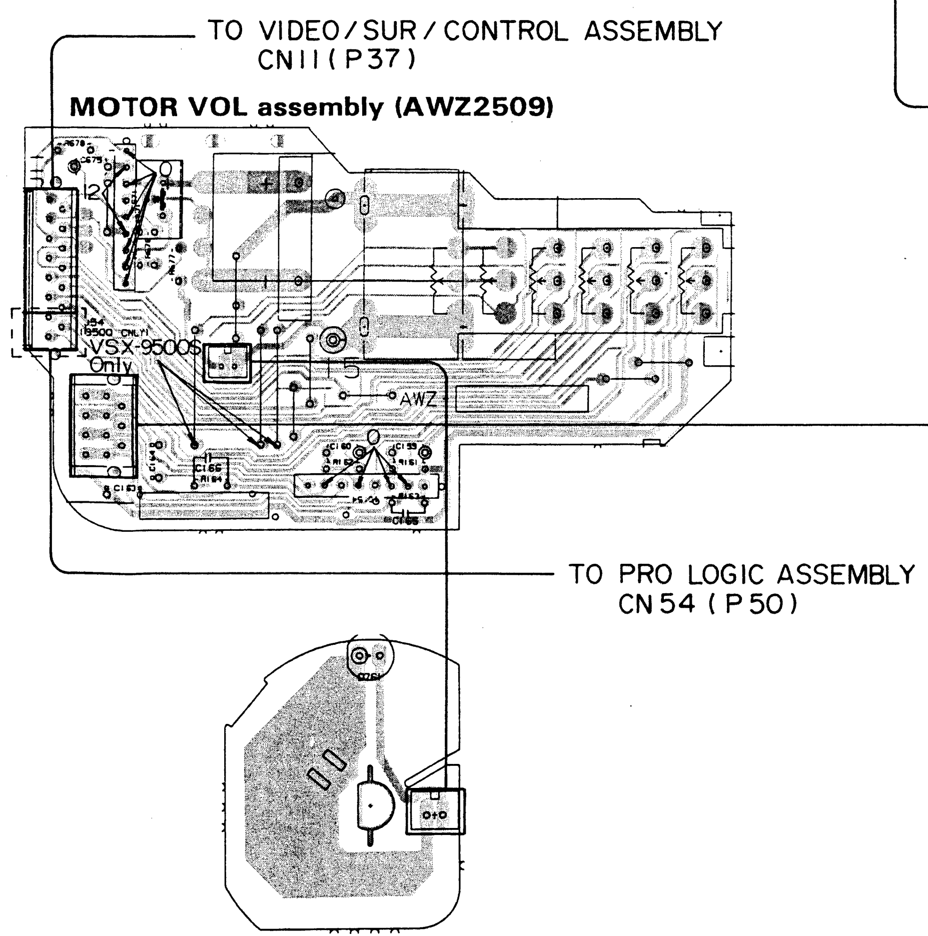
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

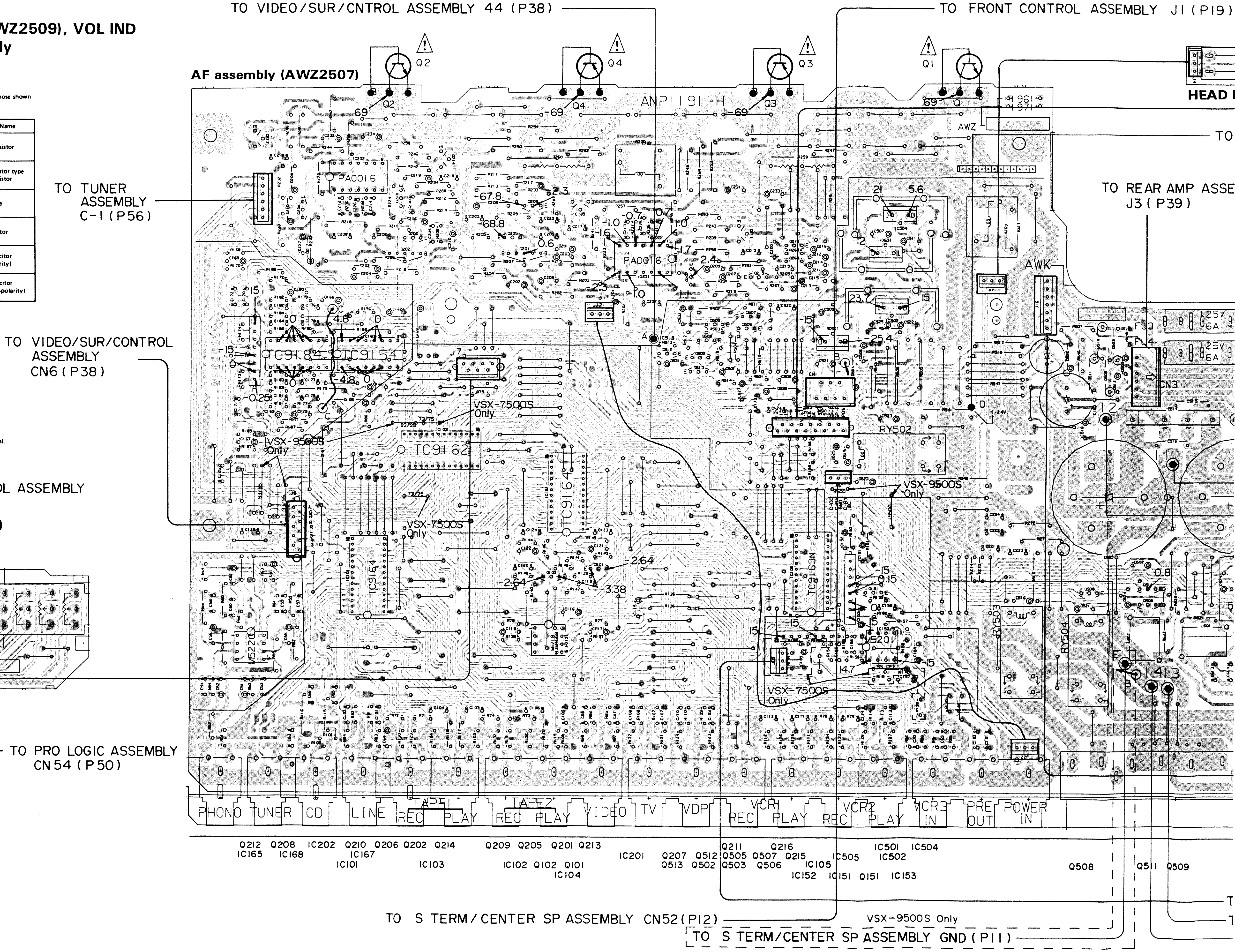
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E Q504	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

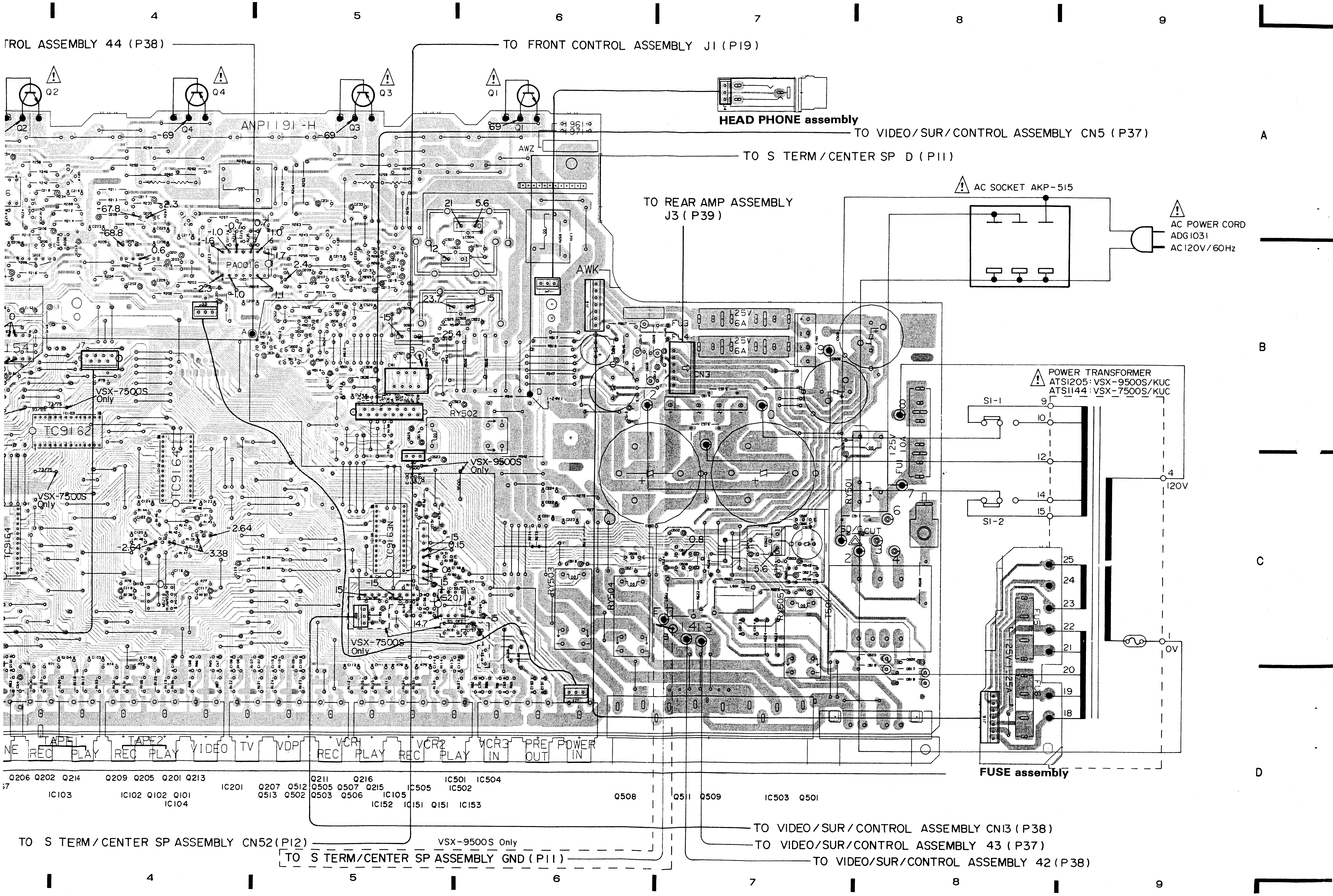
Others

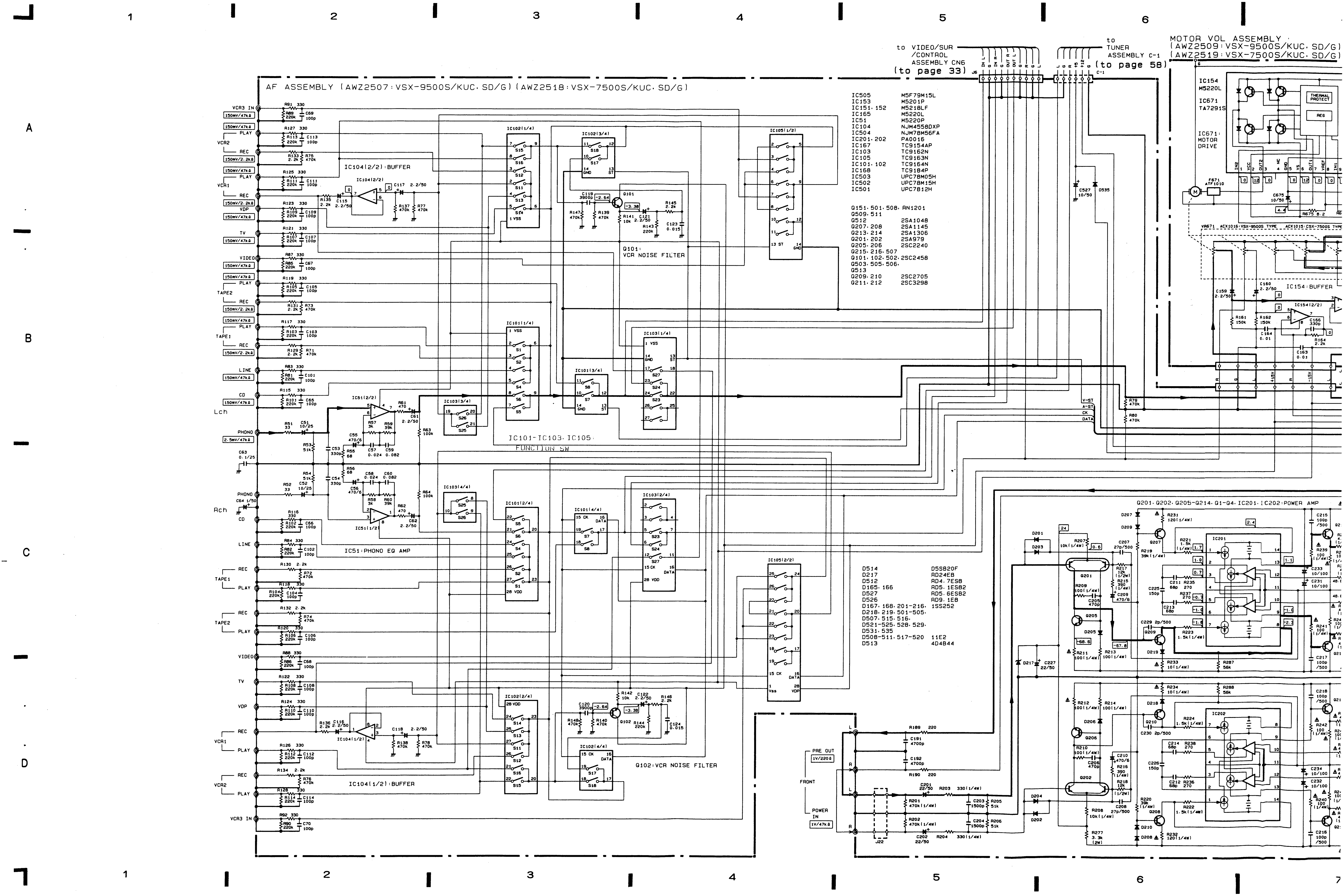
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.


TO VIDEO/SUR/CONTROL ASSEMBLY CN11(P37)
MOTOR VOL assembly (AWZ2509)
VSX-9500S Only
AWZ
TO PRO LOGIC ASSEMBLY CN54(P50)
VOL IND assembly


TO VIDEO/SUR/CNTROL ASSEMBLY 44 (P38)
TO FRONT CONTROL ASSEMBLY J1(P19)
AF assembly (AWZ2507)
Q2
Q4
Q3
Q1
HEAD
TO
TO TUNER ASSEMBLY C-1(P56)
TO VIDEO/SUR/CONTROL ASSEMBLY CN6(P38)
TO REAR AMP ASSE J3(P39)
ANP1191-H
PA0016
TC9184
TC9154
TC9162
TC9164
TC9163N
M5220
RY502
RY503
RY504
AWZ
AWK
CN3
VSX-7500S Only
VSX-9500S Only
PHONO
TUNER
CD
LINE
TAPE1 REC PLAY
TAPE2 REC PLAY
VIDEO
TV
VDP
VCR1 REC PLAY
VCR2 REC PLAY
VCR3 IN
PRE OUT
POWER IN
Q212 IC165
Q208 IC168
IC202
Q210 IC167 IC101
Q206
Q202 IC103
Q214
Q209
Q205 IC102
Q201 Q102
Q213 Q101 IC104
IC201
Q207 Q513
Q512 Q502
Q211 Q505 Q503
Q507 Q506
Q216
Q215 IC105 IC152
IC505 IC151
Q151
IC501 IC502
IC504 IC153
Q508
Q511
Q509
TO S TERM/CENTER SP ASSEMBLY CN52(P12)
VSX-9500S Only
TO S TERM/CENTER SP ASSEMBLY GND (P11)

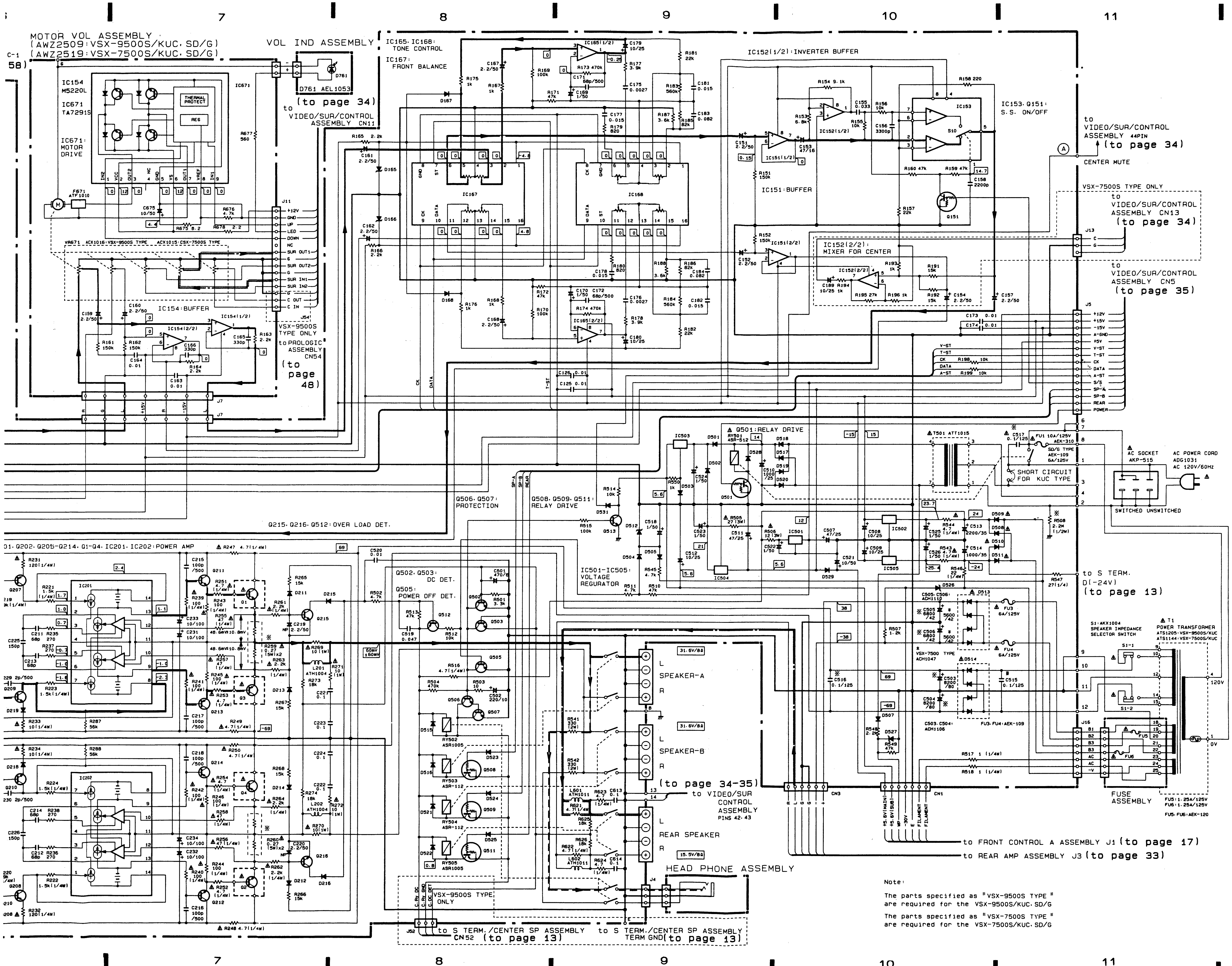

4
5
6
7
8
9
TROL ASSEMBLY 44 (P38)
TO FRONT CONTROL ASSEMBLY J1 (P19)
Q2
Q4
Q3
Q1
ANP1191-H
-69
69
HEAD PHONE assembly
TO VIDEO/SUR/CONTROL ASSEMBLY CN5 (P37)
TO S TERM/CENTER SP D (P11)
AWZ
AC SOCKET AKP-515
TO REAR AMP ASSEMBLY
J3 (P39)
AC POWER CORD
ADG1031
AC120V/60Hz
A
-67.8
-68.8
2.3
-1.0
-0.7
0.7
1.0
1.6
0.6
1.7
2.4
PA0016
2.3
1.0
21
5.6
12
23.7
15
-15
25.4
AWK
125V
6A
J7
CN3
CN1
VSX-7500S
Only
TC9162
RY502
VSX-9500S
Only
TC9164
VSX-7500S
Only
-2.64
-2.64
3.38
TC9163N
15
0.15
0.8
5.6
POWER TRANSFORMER
ATS1205: VSX-9500S/KUC
ATS1144: VSX-7500S/KUC
S1-1
S1-2
9
10
12
14
15
4
120V
125V
10A
FU1
RY501
RY503
RY504
RY505
TS01
6
SD CUT
2
4
7
9
41.3
14.7
VSX-7500S
Only
25
24
23
22
21
20
19
18
FU5
FU8
125V 1.25A
1
0V
B
C
D
NE
TAPE1
REC
PLAY
TAPE2
REC
PLAY
VIDEO
TV
VDP
VCR1
REC
PLAY
VCR2
REC
PLAY
VCR3
IN
PRE
OUT
POWER
IN
FUSE assembly
Q206 Q202 Q214
IC103
Q209 Q205 Q201 Q213
IC102 Q102 Q101
IC104
IC201
Q207 Q512
Q513 Q502
Q211 Q216
Q505 Q507 Q215
Q503 Q506
IC105
IC152 IC151 Q151
IC505
IC501 IC504
IC502
IC153
Q508
Q511 Q509
IC503 Q501
TO VIDEO/SUR/CONTROL ASSEMBLY CN13 (P38)
TO VIDEO/SUR/CONTROL ASSEMBLY 43 (P37)
TO VIDEO/SUR/CONTROL ASSEMBLY 42 (P38)
TO S TERM/CENTER SP ASSEMBLY CN52 (P12)
VSX-9500S Only
TO S TERM/CENTER SP ASSEMBLY GND (P11)


AF ASSEMBLY (AWZ2507:VSX-9500S/KUC, SD/G) (AWZ2518:VSX-7500S/KUC, SD/G)
MOTOR VOL ASSEMBLY (AWZ2509:VSX-9500S/KUC, SD/G) (AWZ2519:VSX-7500S/KUC, SD/G)
to VIDEO/SUR /CONTROL ASSEMBLY CN6 (to page 33)
to TUNER ASSEMBLY C-1 (to page 58)
IC104(2/2):BUFFER
IC104(1/2):BUFFER
IC51:PHONO EQ AMP
Q101: VCR NOISE FILTER
Q102:VCR NOISE FILTER
IC101-IC103, IC105 FUNCTION SW
IC154 M5220L
IC671 TA7291S
IC671: MOTOR DRIVE
THERMAL PROTECT
REG
IC154:BUFFER
Q201, Q202, Q205-Q214, Q1-Q4, IC201, IC202:POWER AMP
VCR3 IN
VCR2
VCR1
PLAY
REC
VDP
TV
VIDEO
TAPE2
TAPE1
LINE
CD
PHONO
Lch
Rch
PRE OUT
FRONT
POWER IN
1V/220Ω
1V/47kΩ
150mV/47kΩ
150mV/2.2kΩ
2.5mV/47kΩ
1
2
3
4
5
6
7
A
B
C
D

IC505	M5F79M15L
IC153	M5201P
IC151, 152	M5218LF
IC165	M5220L
IC51	M5220P
IC104	NJM4558DXP
IC504	NJM78M56FA
IC201, 202	PA0016
IC167	TC9154AP
IC103	TC9162N
IC105	TC9163N
IC101, 102	TC9164N
IC168	TC9184P
IC503	UPC78M05H
IC502	UPC78M15H
IC501	UPC7812H

Q151, 501, 508,	RN1201
Q509, 511	
Q512	2SA1048
Q207, 208	2SA1145
Q213, 214	2SA1306
Q201, 202	2SA979
Q205, 206	2SC2240
Q215, 216, 507	
Q101, 102, 502,	2SC2458
Q503, 505, 506,	
Q513	
Q209, 210	2SC2705
Q211, 212	2SC3298

D514	D5SB20F
D217	RD24EB
D512	RD4.7ESB
D165, 166	RD5.1ESB2
D527	RD5.6ESB2
D526	RD9.1EB
D167, 168, 201-216,	1SS252
D218, 219, 501-505,	
D507, 515, 516,	
D521-525, 528, 529,	
D531, 535	
D508-511, 517-520	11E2
D513	4D4B44


MOTOR VOL ASSEMBLY
(AWZ2509:VSX-9500S/KUC,SD/G)
(AWZ2519:VSX-7500S/KUC,SD/G)
C-1 58)
IC154 M5220L
IC671 TA7291S
IC671: MOTOR DRIVE
THERMAL PROTECT
REG
F671 ATF1010
VR671 ACX1016:VSX-9500S TYPE ACX1015:CSX-7500S TYPE
VOL IND ASSEMBLY
D761 AEL1053
(to page 34)
to VIDEO/SUR/CONTROL ASSEMBLY CN11
J11
+12V
GND
UP
LED
DOWN
NC
SUR OUT1
SUR OUT2
SUR IN1
SUR IN2
C OUT
C IN
J54
VSX-9500S TYPE ONLY
to PROLOGIC ASSEMBLY CN54
(to page 48)
IC154:BUFFER
IC154(1/2)
IC154(2/2)
J7
IC165,IC168: TONE CONTROL
IC167: FRONT BALANCE
IC165(1/2)
IC165(2/2)
IC167
IC168
CK
DATA
T-ST
IC152(1/2):INVERTER BUFFER
IC151:BUFFER
IC151(1/2)
IC151(2/2)
IC152(2/2): MIXER FOR CENTER
IC153,Q151: S.S. ON/OFF
IC153
Q151
to VIDEO/SUR/CONTROL ASSEMBLY 44PIN (to page 34)
CENTER MUTE
VSX-7500S TYPE ONLY
to VIDEO/SUR/CONTROL ASSEMBLY CN13 (to page 34)
J13
to VIDEO/SUR/CONTROL ASSEMBLY CN5 (to page 35)
J5
+12V
+15V
-15V
A-GND
+5V
V-ST
T-ST
CK
DATA
A-ST
S/S
SP-A
SP-B
REAR
POWER
Q215,Q216,Q512:OVER LOAD DET.
Q506,Q507: PROTECTION
Q508,Q509,Q511: RELAY DRIVE
Q501:RELAY DRIVE
RY501 ASR-512
IC503
T501 ATT1015
FU1 10A/125V AEK-310
SD/G TYPE AEK-109 6A/125V
SHORT CIRCUIT FOR KUC TYPE
AC SOCKET AKP-515
AC POWER CORD ADG1031 AC 120V/60Hz
SWITCHED UNSWITCHED
IC501-IC505: VOLTAGE REGULATOR
IC501
IC502
IC504
IC505
to S TERM. D(-24V) (to page 13)
Q201,Q202,Q205-Q214,Q1-Q4,IC201,IC202:POWER AMP
IC201
IC202
Q502,Q503: DC DET.
Q505: POWER OFF DET.
RY502 ASR1005
RY503 ASR-112
RY504 ASR-112
RY505 ASR1005
L201 ATH1004
L202 ATH1004
L601 ATH1011
L602 ATH1011
SPEAKER-A
SPEAKER-B
REAR SPEAKER
L
R
(to page 34-35)
to VIDEO/SUR CONTROL ASSEMBLY PINS 42,43
HEAD PHONE ASSEMBLY
J4
VSX-9500S TYPE ONLY
J52
to S TERM./CENTER SP ASSEMBLY CN52 (to page 13)
to S TERM./CENTER SP ASSEMBLY TERM GND (to page 13)
CN3
CN1
D513
D514
C505,C506: ACH1110
VSX-7500 TYPE ACH1047
C503,C504: ACH1106
FU3 6A/125V
FU4 6A/125V
FU3,FU4:AEK-109
S1:AKX1004 SPEAKER IMPEDANCE SELECTOR SWITCH
S1-1
S1-2
T1 POWER TRANSFORMER ATS1205:VSX-9500S/KUC ATS1144:VSX-7500S/KUC
120V
0V
J16
FU5
FU6
FUSE ASSEMBLY
FU5:1.25A/125V
FU6:1.25A/125V
FU5,FU6:AEK-120
to FRONT CONTROL A ASSEMBLY J1 (to page 17)
to REAR AMP ASSEMBLY J3 (to page 33)
7
8
9
10
11
12
A
B
C
D

Note:

The parts specified as "VSX-9500S TYPE" are required for the VSX-9500S/KUC, SD/G

The parts specified as "VSX-7500S TYPE" are required for the VSX-7500S/KUC, SD/G

3.5 VIDEO/SUR/CONTROL assembly 1/2 (AWZ2511) AND REAR AMP assembly (AWZ2516)

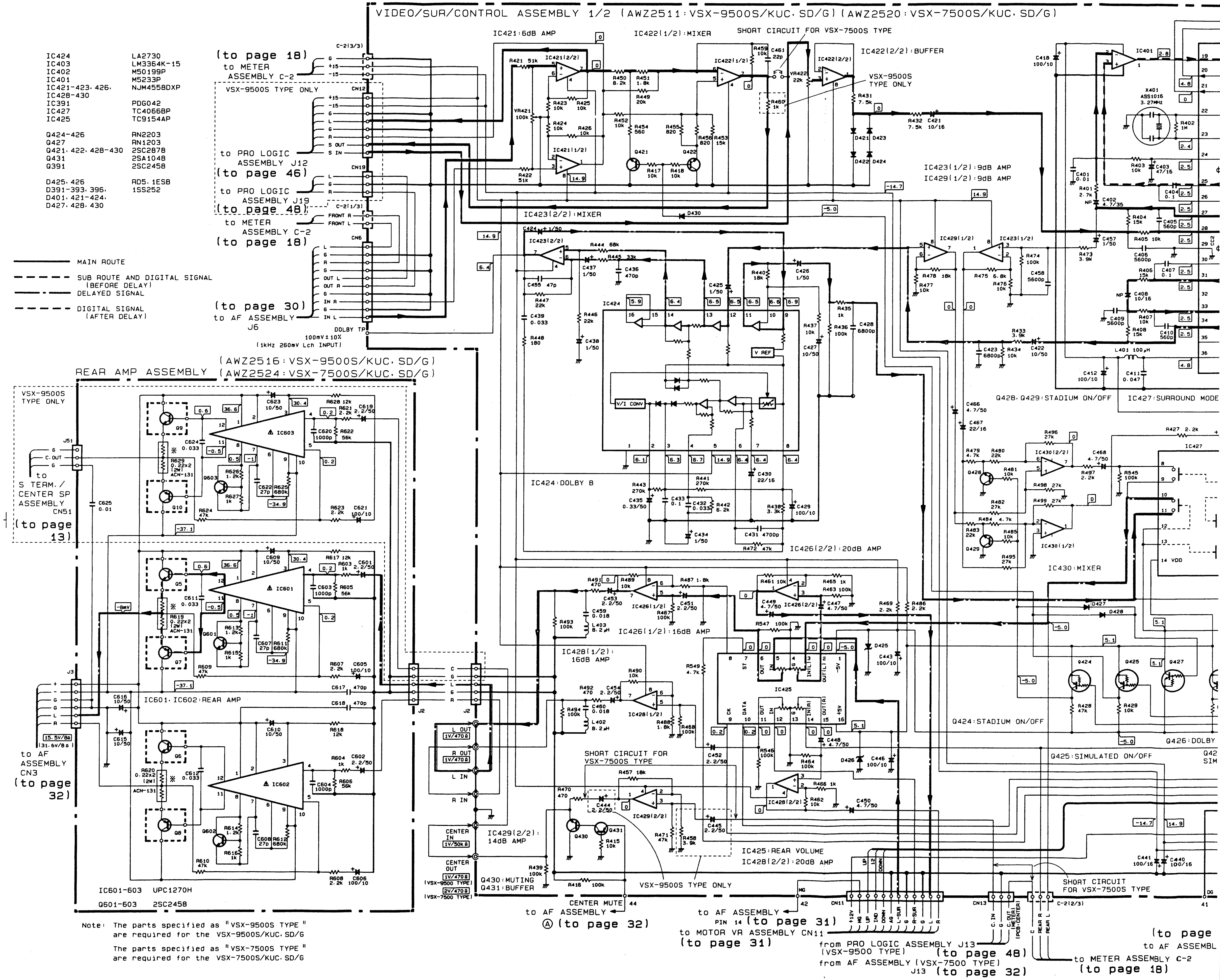
IC424	LA2730
IC403	LM3364K-15
IC402	M50199P
IC401	M5233P
IC421-423, 426, IC428-430	NJM4558DXP
IC391	PDG042
IC427	TC4066BP
IC425	TC9154AP
Q424-426	RN2203
Q427	RN1203
Q421, 422, 428-430	2SC2878
Q431	2SA1048
Q391	2SC2458
D425, 426	RD5.1ESB
D391-393, 396, D401, 421-424, D427, 428, 430	1SS252

——— MAIN ROUTE

– – – – – SUB ROUTE AND DIGITAL SIGNAL (BEFORE DELAY)

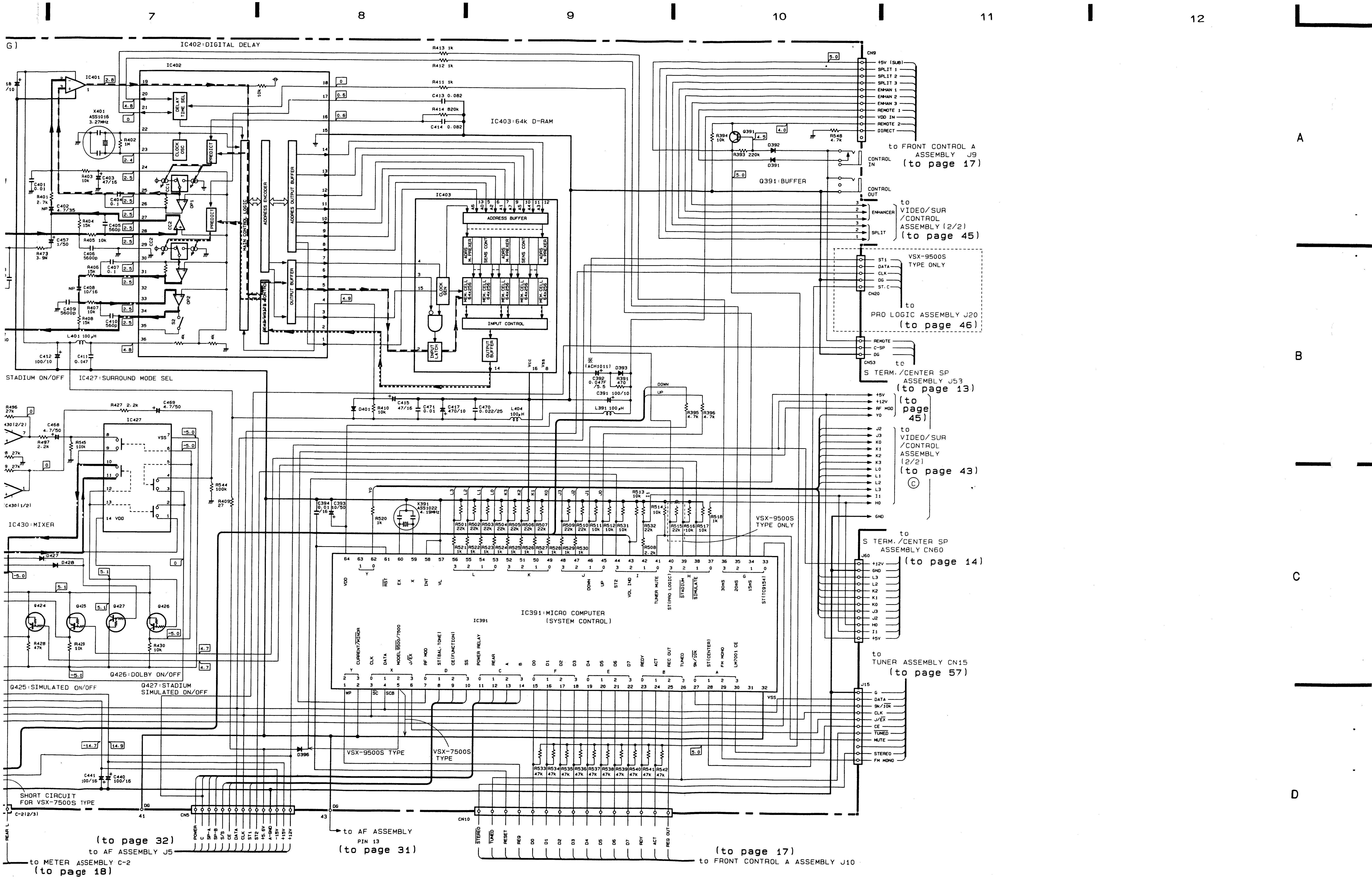
——·—— DELAYED SIGNAL

– – – – – DIGITAL SIGNAL (AFTER DELAY)

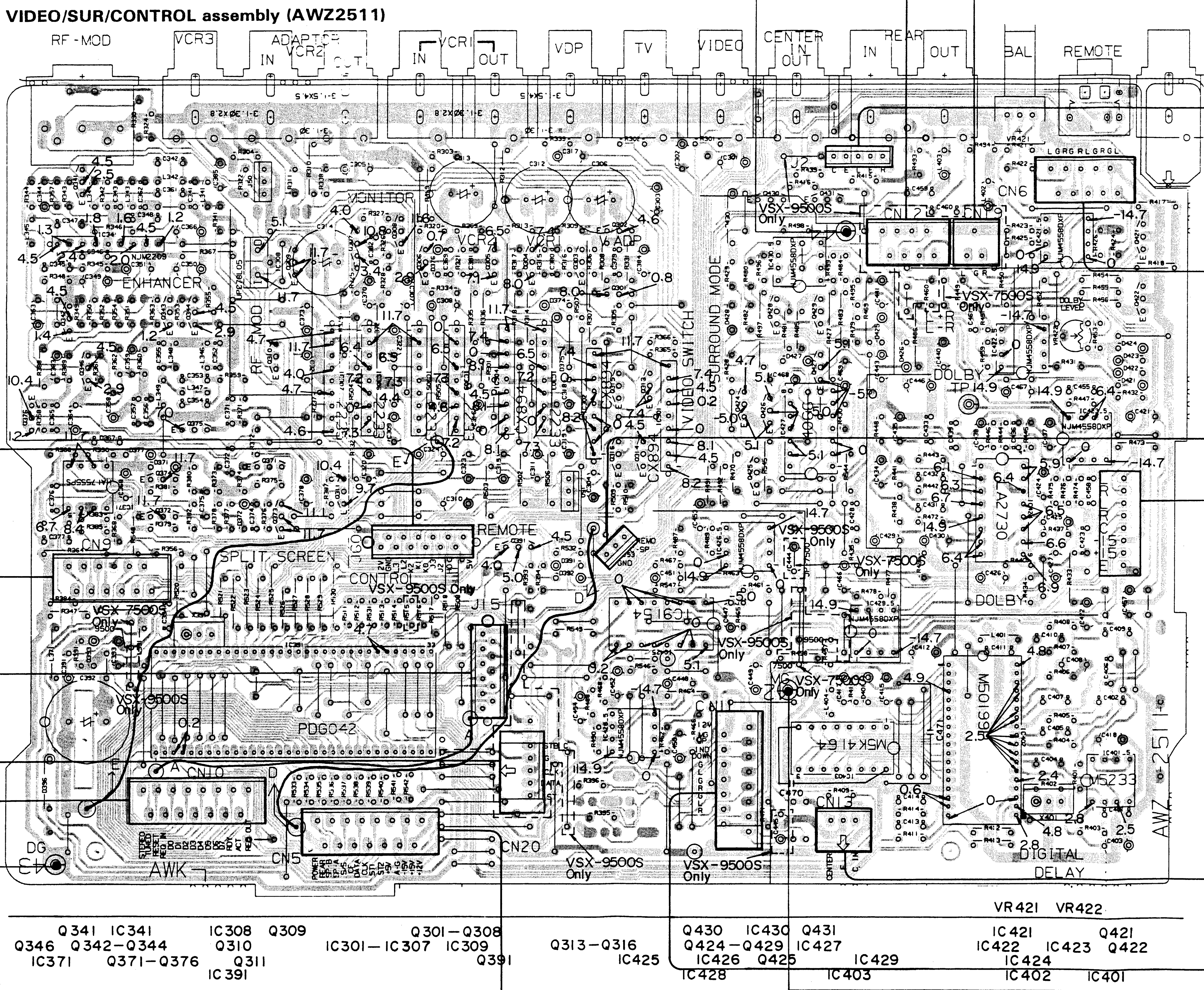

VIDEO/SUR/CONTROL ASSEMBLY 1/2 (AWZ2511: VSX-9500S/KUC, SD/G) (AWZ2520: VSX-7500S/KUC, SD/G)
REAR AMP ASSEMBLY (AWZ2516: VSX-9500S/KUC, SD/G) (AWZ2524: VSX-7500S/KUC, SD/G)
IC421: 6dB AMP
IC422(1/2): MIXER
SHORT CIRCUIT FOR VSX-7500S TYPE
IC422(2/2): BUFFER
VSX-9500S TYPE ONLY
IC423(2/2): MIXER
IC424: DOLBY B
IC423(1/2): 9dB AMP
IC429(1/2): 9dB AMP
IC426(2/2): 20dB AMP
IC426(1/2): 16dB AMP
IC428(1/2): 16dB AMP
IC429(2/2): 14dB AMP
IC425: REAR VOLUME
IC428(2/2): 20dB AMP
IC430: MIXER
IC427: SURROUND MODE
Q428, Q429: STADIUM ON/OFF
Q424: STADIUM ON/OFF
Q425: SIMULATED ON/OFF
Q426: DOLBY
Q430: MUTING
Q431: BUFFER
IC601, IC602: REAR AMP
IC601-603 UPC1270H
Q601-603 2SC2458
(to page 18) to METER ASSEMBLY C-2
to PRO LOGIC ASSEMBLY J12 (to page 46)
to PRO LOGIC ASSEMBLY J19 (to page 48)
(to page 30) to AF ASSEMBLY J6
to S TERM. / CENTER SP ASSEMBLY CN51 (to page 13)
to AF ASSEMBLY CN3 (to page 32)
CENTER MUTE to AF ASSEMBLY Ⓐ (to page 32)
to AF ASSEMBLY PIN 14 (to page 31)
to MOTOR VR ASSEMBLY CN11 (to page 31)
from PRO LOGIC ASSEMBLY J13 (VSX-9500 TYPE) (to page 48)
from AF ASSEMBLY (VSX-7500 TYPE) J13 (to page 32)
to METER ASSEMBLY C-2 (to page 18)
SHORT CIRCUIT FOR VSX-7500S TYPE
DOLBY TP 100mV ±10% (1kHz 250mV Lch INPUT)

Note: The parts specified as "VSX-9500S TYPE" are required for the VSX-9500S/KUC, SD/G

The parts specified as "VSX-7500S TYPE" are required for the VSX-7500S/KUC, SD/G


7
8
9
10
11
12
A
B
C
D
IC402:DIGITAL DELAY
IC402
IC401
X401
ASS1016
3.27MHz
DELAY TIME SEL
CLOCK OSC
PREDICT
MAIN CONTROL LOGIC
ADDRESS ENCODER
ADDRES OUTPUT BUFFER
OUTPUT BUFFER
READ/WRITE CONTROL
OP1
OP2
CC1
CC2
R413 1k
R412 1k
R411 1k
C413 0.082
R414 820k
C414 0.082
IC403:64k D-RAM
IC403
ADDRESS BUFFER
ADRS M.PREXER
SENS CONT
MEM.CELL 64x256
INPUT CONTROL
CLOCK GEN
INPUT LATCH
OUTPUT BUFFER
L401 100μH
C412 100/10
C411 0.047
STADIUM ON/OFF
IC427:SURROUND MODE SEL
IC427
IC430:MIXER
IC430(1/2)
Q424
Q425
Q427
Q426
R428 47k
R429 10k
R430 10k
Q426:DOLBY ON/OFF
Q425:SIMULATED ON/OFF
Q427:STADIUM SIMULATED ON/OFF
D427
D428
D401
R410 10k
C415 47/16
C471 0.01
C417 470/10
C470 0.022/25
L404 100μH
D396
C441 100/16
C440 100/16
SHORT CIRCUIT FOR VSX-7500S TYPE
C-2(2/3)
CN5
POWER
C
SP-A
SP-B
S/S
CE
DATA
CLK
ST1
ST2
+5.6V
A-GND
-15V
+15V
+12V
41
DG
43
(to page 32)
to AF ASSEMBLY J5
to AF ASSEMBLY PIN 13
(to page 31)
to METER ASSEMBLY C-2
(to page 18)
IC391:MICRO COMPUTER (SYSTEM CONTROL)
IC391
X391
ASS1022
4.19MHz
C394 0.01/16
C393 10/50
R520 1k
VSX-9500S TYPE
VSX-7500S TYPE
VSX-9500S TYPE ONLY
R533 47k
R534 47k
R535 47k
R536 47k
R537 47k
R538 47k
R539 47k
R540 47k
R541 47k
R542 47k
CN10
STEREO
TUNED
RESET
REQ
D0
D1
D2
D3
D4
D5
D6
D7
RDY
ACT
REQ OUT
(to page 17)
to FRONT CONTROL A ASSEMBLY J10
CN9
+5V (SUB)
SPLIT 1
SPLIT 2
SPLIT 3
ENHAN 1
ENHAN 2
ENHAN 3
REMOTE 1
VDD IN
REMOTE 2
DIRECT
to FRONT CONTROL A ASSEMBLY J9
(to page 17)
Q391
R394 10k
R393 220k
D392
D391
R548 4.7k
Q391:BUFFER
CONTROL IN
CONTROL OUT
ENHANCER
SPLIT
to VIDEO/SUR /CONTROL ASSEMBLY (2/2)
(to page 45)
ST1
DATA
CLK
DG
ST.C
CN20
VSX-9500S TYPE ONLY
to PRO LOGIC ASSEMBLY J20
(to page 46)
REMOTE
C-SP
DG
CN53
to S TERM./CENTER SP ASSEMBLY J53
(to page 13)
C392 0.047F /5.5
(ACH1011)
D393
R391 470
C391 100/10
L391 100μH
DOWN
UP
R395 4.7k
R396 4.7k
+5V
+12V
RF MOD
Y0
(to page 45)
J2
J3
K0
K1
K2
K3
L0
L1
L2
L3
I1
H0
to VIDEO/SUR /CONTROL ASSEMBLY (2/2)
(to page 43)
ⓒ
GND
to S TERM./CENTER SP ASSEMBLY CN60
(to page 14)
J60
to TUNER ASSEMBLY CN15
(to page 57)
J15
G
DATA
9K/10K
CLK
J/EX
CE
TUNED
MUTE
STEREO
FM MONO
VDD
RST
EX
INT
VL
DOWN
UP
ST2
VOL IND
TUNER MUTE
ST(PRO LOGIC)
STADIUM
SIMULATE
30mS
20mS
15mS
ST(TC9154)
CURRENT/MINOR
CLK
DATA
MODEL 9500/7500
J/EX
RF MOD
ST(BAL-TONE)
CE(FUNCTION)
SS
POWER RELAY
REAR
A
B
D0
D1
D2
D3
D4
D5
D6
D7
REDY
ACT
REC OUT
TUNED
9K/10K
ST(CENTER)
FM MONO
LM7001 CE
WP
SC
SCB
VSS

VIDEO/SUR/CONTROL assembly (AWZ2511)


RF-MOD
VCR3
ADAPTOR VCR2
IN
OUT
VCR1
VDP
TV
VIDEO
CENTER
REAR
BAL
REMOTE
MONITOR
ENHANCER
SURROUND MODE
VIDEO SWITCH
DOLBY
SPLIT SCREEN
CONTROL
REMOTE
DIGITAL DELAY
CN1
CN5
CN6
CN9
CN10
CN13
CN20
J15
PDG042
M50199
MSK4164
M5233
LA2730
VSX-9500S Only
VSX-7500S Only
AWZ2511
Q341 IC341
Q346 Q342–Q344
IC371 Q371–Q376
IC308 Q309
Q310
Q311
IC391
Q301–Q308
IC301–IC307 IC309
Q391
Q313–Q316
IC425
Q430 IC430 Q431
Q424–Q429 IC427
IC426 Q425
IC428
IC429
IC403
VR421 VR422
IC421
IC422 IC423
IC424
IC402
Q421
Q422
IC401

TO PRO LOGIC ASSEMBLY J19 (P50)

TO PRO LOGIC ASSEMBLY J12 (P50)

TO AF ASSEMBLY A (P27)

TO S TERM / CENTER SP ASSEMBLY CN60 (P11)

TO FRONT CONTROL A ASSEMBLY J9(P19)

TO TUNER ASSEMBLY CN15(P56)

TO PRO LOGIC ASSEMBLY J20 (P49)

TO AF ASSEMBLY PIN13 (P28)

TO FRONT CONTROL A ASSEMBLY J10 (P19)

TO AF ASSEMBLY J5 (P27)

TO AF ASSEMBLY PIN14 (P28)

TO S TERM./CENTER SP ASSEMBLY CN53 (P12)

TO METER AMP ASSEMBLY C-2 (P20)

FROM PRO LOGIC ASSEMBLY J1

FROM AF ASSEMBLY CN13(P27) (

TO A

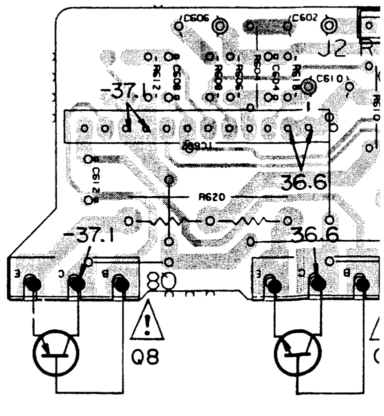
NOTE

1. This P.C.B connection diagr

2. The parts which have beer with the corresponding wiri

P.C.B. pattern diagram indicati
Q504 E
Q215
D203
R237
C513
C518

REAR AMP assembly (A


J2
-37.1
36.6
-37.1
36.6
R620
Q8

NOTE

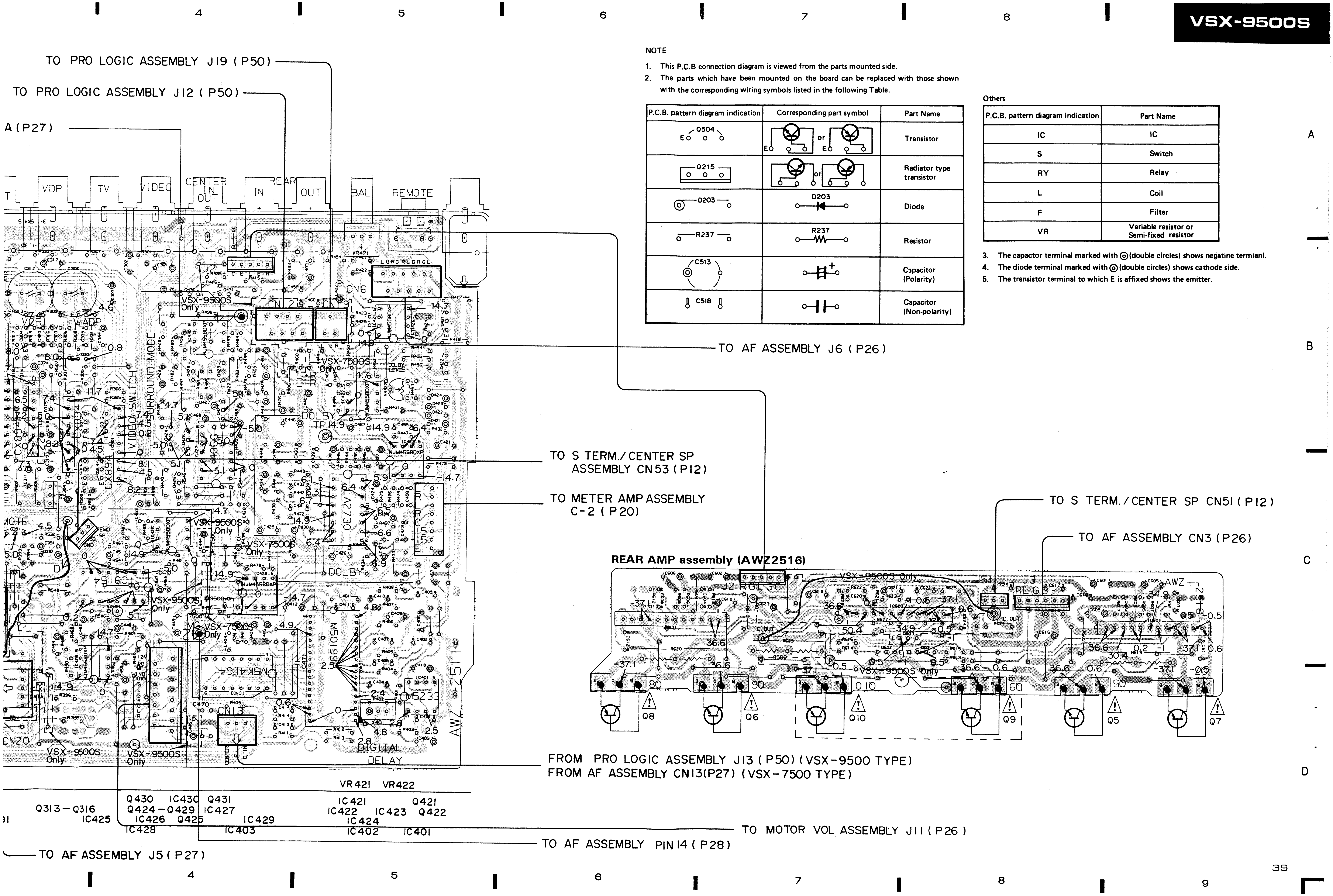
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

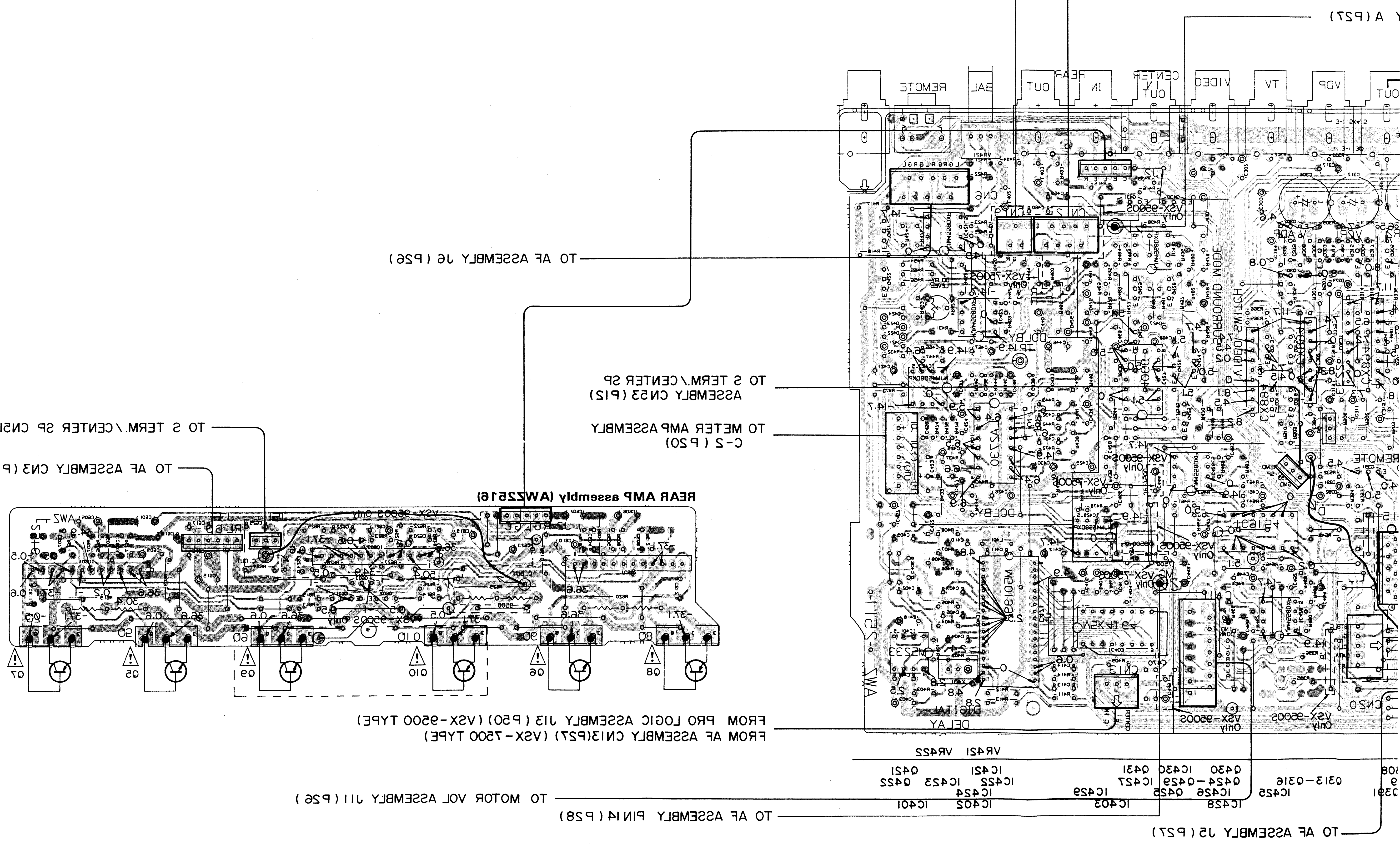
Others

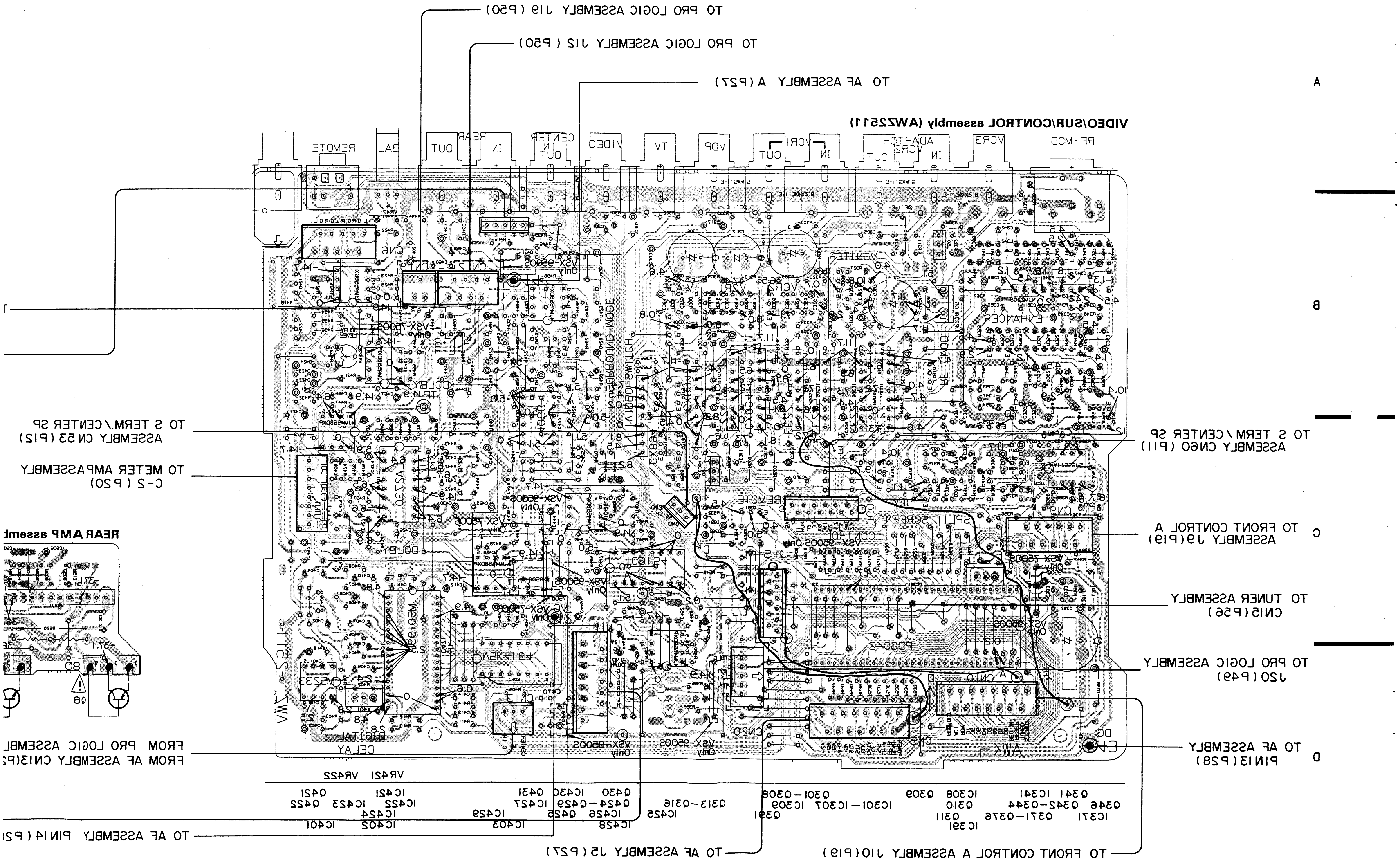
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.


4
5
6
7
8
9
A
B
C
D
TO PRO LOGIC ASSEMBLY J19 (P50)
TO PRO LOGIC ASSEMBLY J12 (P50)
A (P27)
VDP
TV
VIDEO
CENTER IN OUT
REAR IN OUT
BAL
REMOTE
TO AF ASSEMBLY J6 (P26)
SURROUND MODE
VIDEO SWITCH
DOLBY
TP
DOLBY LEVEL
TO S TERM./CENTER SP ASSEMBLY CN53 (P12)
TO METER AMP ASSEMBLY C-2 (P20)
VSX-9500S Only
VSX-7500S Only
NJM4558DXP
LA2730
M50199
M5K4164
M5233
CN1
CN2
CN6
CN13
CN20
DIGITAL DELAY
AWZ 2511
FROM PRO LOGIC ASSEMBLY J13 (P50) (VSX-9500 TYPE)
FROM AF ASSEMBLY CN13(P27) (VSX-7500 TYPE)
VR421 VR422
Q313−Q316
IC425
Q430 IC430 Q431
Q424−Q429 IC427
IC426 Q425
IC428
IC429
IC403
IC421
IC422 IC423
IC424
IC402 IC401
Q421
Q422
TO MOTOR VOL ASSEMBLY J11 (P26)
TO AF ASSEMBLY PIN14 (P28)
TO AF ASSEMBLY J5 (P27)
REAR AMP assembly (AWZ2516)
TO S TERM./CENTER SP CN51 (P12)
TO AF ASSEMBLY CN3 (P26)
J2
J3
J51
C. OUT
AWZ
VSX-9500S Only
Q8
Q6
Q10
Q9
Q5
Q7
-37.1
36.6
50.4
-34.9
0.5
0.6
30.4

NOTE:
This picture shows the foil side of the printed circuit.


TO PRO LOGIC ASSEMBLY J19 (P50)
TO PRO LOGIC ASSEMBLY J12 (P50)
A (P27)
REMOTE
BAL
REAR
OUT
IN
CENTER
IN
OUT
VIDEO
TV
VDP
OUT
CN6
CN2
VSX-9500S Only
DOLBY LEVEL
SURROUND MODE
TO AF ASSEMBLY J6 (P26)
TO S TERM./CENTER SP ASSEMBLY CN53 (P12)
TO METER AMP ASSEMBLY C-2 (P20)
TO S TERM./CENTER SP CN51 (P12)
TO AF ASSEMBLY CN3 (P26)
REAR AMP assembly (AWZ2516)
Q7
Q5
Q9
Q10
Q6
Q8
DIGITAL DELAY
CN13
CN20
AWZ
FROM PRO LOGIC ASSEMBLY J13 (P50) (VSX-9500 TYPE)
FROM AF ASSEMBLY CN13(P27) (VSX-7500 TYPE)
VR421 VR422
IC421 Q421
IC422 IC423 Q422
IC424
IC401 IC402
Q431 IC430 Q430
IC427 Q424-Q429
IC429 Q425 IC426
IC403 IC428
Q313-Q316
IC425
TO MOTOR VOL ASSEMBLY J11 (P26)
TO AF ASSEMBLY PIN14 (P28)
TO AF ASSEMBLY J5 (P27)


VIDEO/SUR/CONTROL assembly (AWZ2511)
TO PRO LOGIC ASSEMBLY J19 (P50)
TO PRO LOGIC ASSEMBLY J12 (P50)
TO AF ASSEMBLY A (P27)
REMOTE
BAL
REAR
OUT
IN
CENTER
IN
OUT
VIDEO
TV
VDP
VCR1
OUT
IN
ADAPTER
VCR2
OUT
IN
VCR3
RF-MOD
MONITOR
ENHANCER
DOLBY
REMOTE
SPLIT SCREEN
CONTROL
VSX-9500S Only
VSX-7500S Only
DIGITAL
DELAY
CN6
CN1
CN2
CN5
CN10
CN13
CN20
PDG042
TO S TERM./CENTER SP ASSEMBLY CN53 (P12)
TO METER AMPASSEMBLY C-2 (P20)
REAR AMP assemb
FROM PRO LOGIC ASSEMBL
FROM AF ASSEMBLY CN13(P
TO AF ASSEMBLY PIN14 (P2
TO AF ASSEMBLY J5 (P27)
TO FRONT CONTROL A ASSEMBLY J10 (P19)
TO AF ASSEMBLY PIN13 (P28)
TO PRO LOGIC ASSEMBLY J20 (P49)
TO TUNER ASSEMBLY CN15 (P56)
TO FRONT CONTROL A ASSEMBLY J9 (P19)
TO S TERM./CENTER SP ASSEMBLY CN60 (P11)
Q341 IC341
Q346 Q342-Q344
IC371 Q371-Q376
IC308 Q309
Q310
Q311
IC391
Q301-Q308
IC301-IC307 IC309
Q391
Q313-Q316
IC425
Q430 IC430 Q431
Q424-Q429 IC427
IC426 Q425 IC429
IC428 IC403
IC421 Q421
IC422 IC423 Q422
IC424
IC402 IC401
VR421 VR422
1
2
3
4
5
6
A
B
C
D

3.6 VIDEO/SUR/CONTROL assembly 2/2 (AWZ2511)

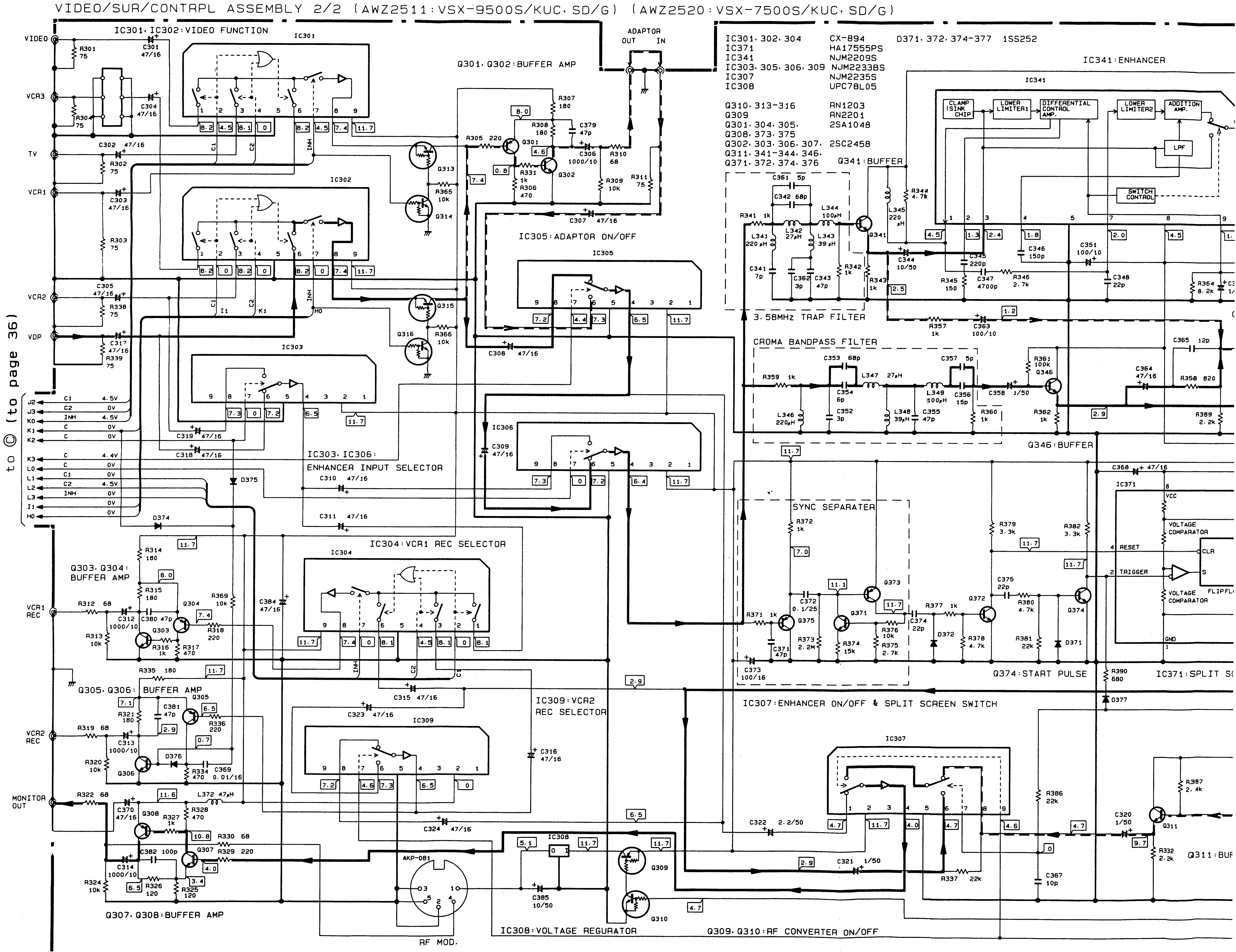
A

B

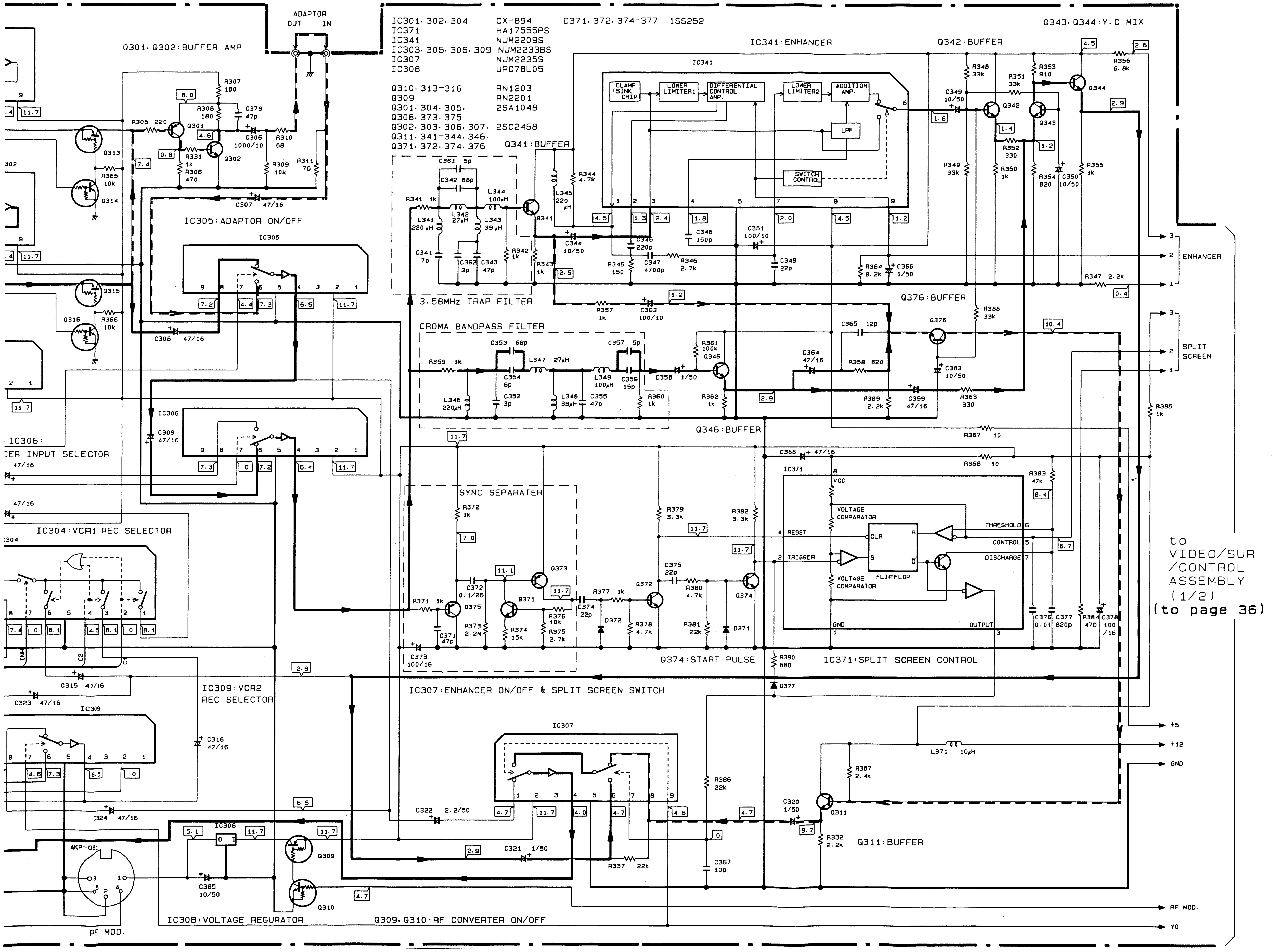
to © (to page 36)

C

D

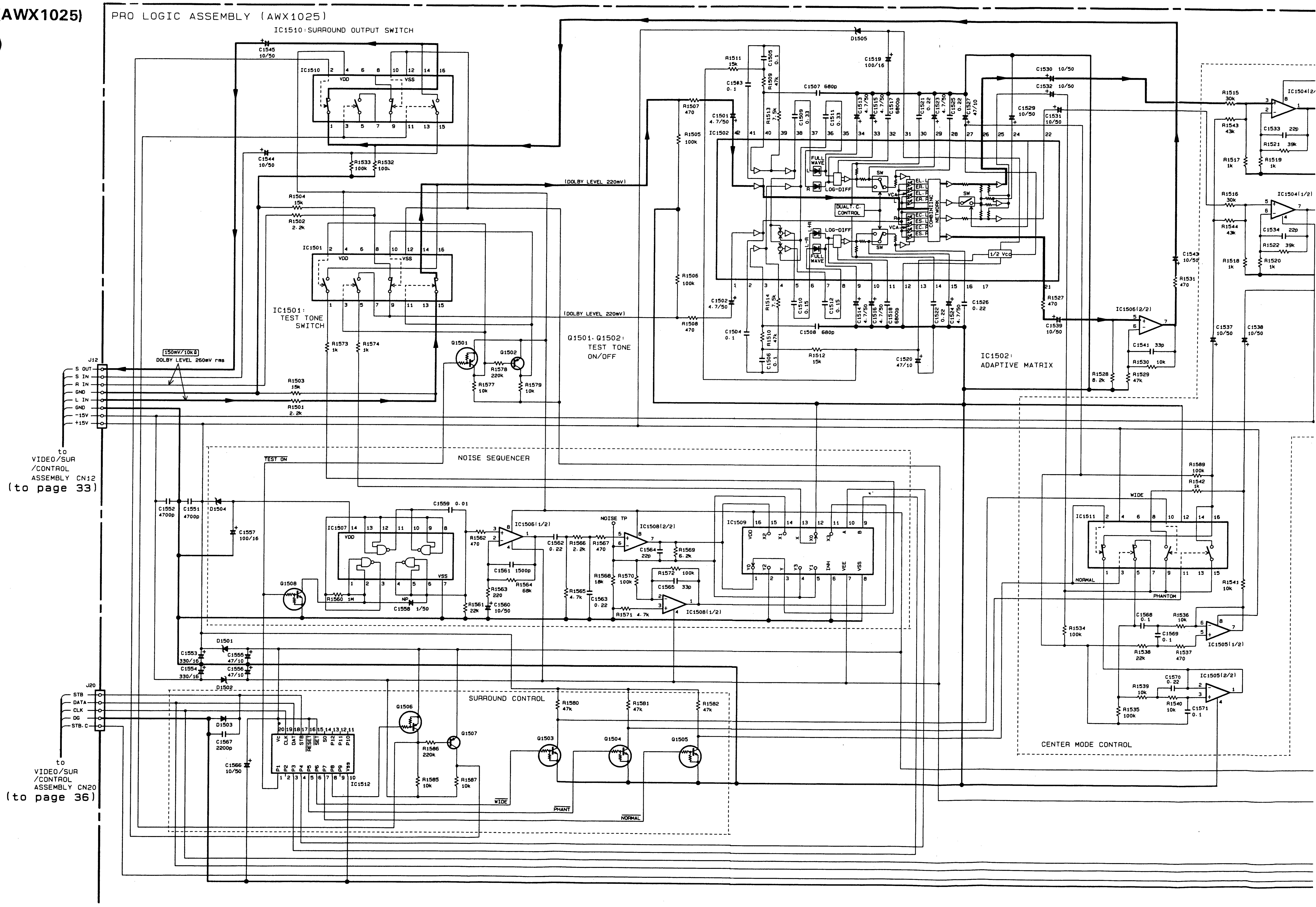

VIDEO/SUR/CONTRPL ASSEMBLY 2/2 (AWZ2511:VSX-9500S/KUC, SD/G) (AWZ2520:VSX-7500S/KUC, SD/G)
IC301, IC302: VIDEO FUNCTION
IC301
IC302
IC303
IC304
IC305
IC306
IC307
IC308
IC309
IC341
IC371
VIDEO
VCR3
TV
VCR1
VCR2
VDP
to © (to page 36)
J2
J3
K0
K1
K2
K3
L0
L1
L2
L3
I1
H0
VCR1 REC
VCR2 REC
MONITOR OUT
ADAPTOR OUT IN
Q301, Q302: BUFFER AMP
IC305: ADAPTOR ON/OFF
IC303, IC306: ENHANCER INPUT SELECTOR
IC304: VCR1 REC SELECTOR
IC309: VCR2 REC SELECTOR
Q303, Q304: BUFFER AMP
Q305, Q306: BUFFER AMP
Q307, Q308: BUFFER AMP
AKP-081
RF MOD.
IC308: VOLTAGE REGURATOR
Q309, Q310: RF CONVERTER ON/OFF
IC307: ENHANCER ON/OFF & SPLIT SCREEN SWITCH
IC301, 302, 304 CX-894
IC371 HA17555PS
IC341 NJM2209S
IC303, 305, 306, 309 NJM2233BS
IC307 NJM2235S
IC308 UPC78L05
D371, 372, 374-377 1SS252
Q310, 313-316 RN1203
Q309 RN2201
Q301, 304, 305, Q308, 373, 375 2SA1048
Q302, 303, 306, 307, Q311, 341-344, 346, Q371, 372, 374, 376 2SC2458
IC341: ENHANCER
CLAMP (SINK CHIP)
LOWER LIMITER1
DIFFERENTIAL CONTROL AMP.
LOWER LIMITER2
ADDITION AMP.
LPF
SWITCH CONTROL
Q341: BUFFER
3.58MHz TRAP FILTER
CROMA BANDPASS FILTER
Q346: BUFFER
SYNC SEPARATER
Q374: START PULSE
IC371: SPLIT S
VCC
VOLTAGE COMPARATOR
RESET
TRIGGER
CLR
FLIPFL
GND
Q311: BUF

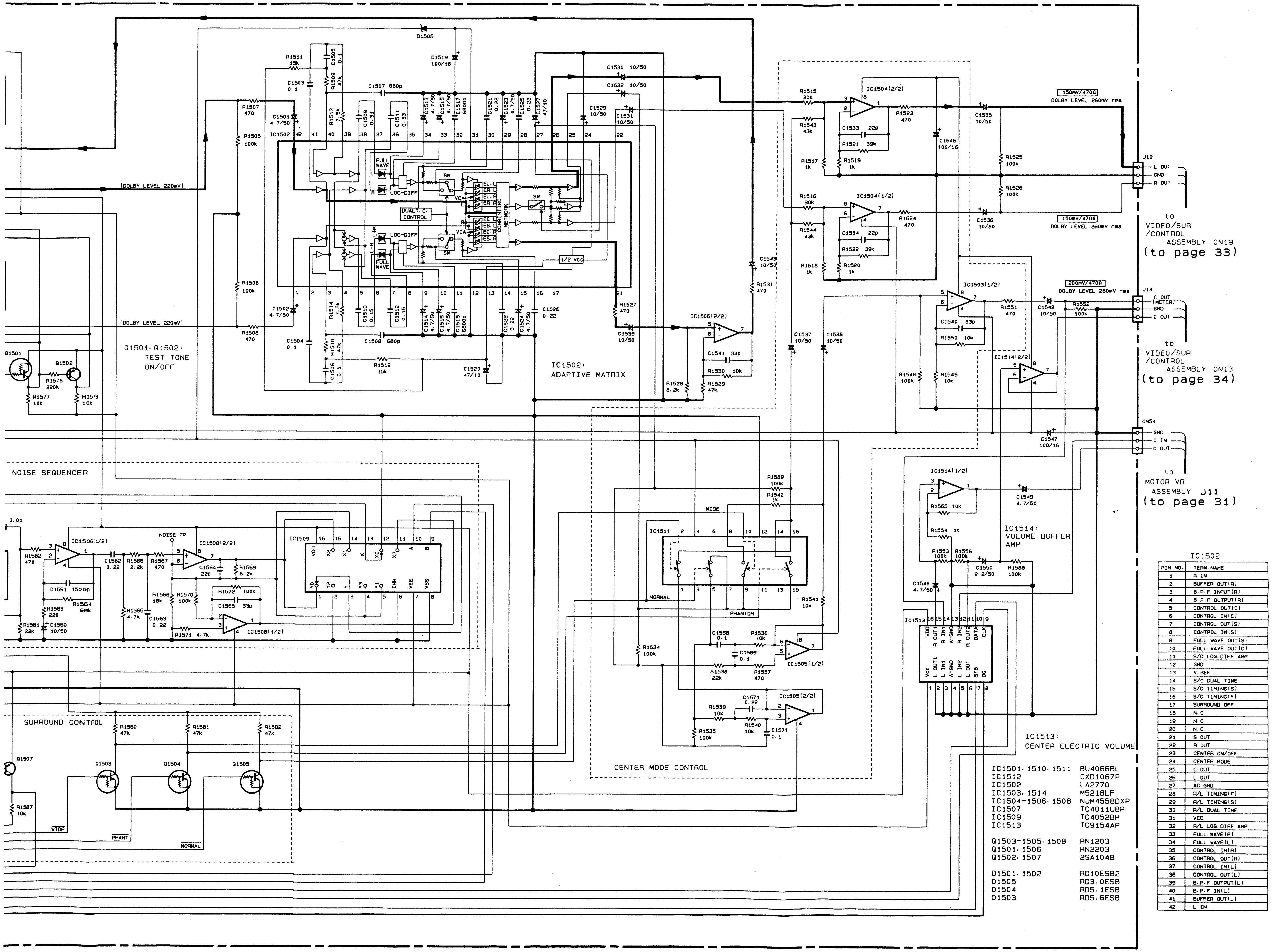
(AWZ2511:VSX-9500S/KUC.SD/G) (AWZ2520:VSX-7500S/KUC.SD/G)


ADAPTOR
OUT IN
Q301.Q302:BUFFER AMP
IC301.302.304 CX-894
IC371 HA17555PS
IC341 NJM2209S
IC303.305.306.309 NJM2233BS
IC307 NJM2235S
IC308 UPC78L05
Q310.313-316 RN1203
Q309 RN2201
Q301.304.305. 2SA1048
Q308.373.375
Q302.303.306.307. 2SC2458
Q311.341-344.346.
Q371.372.374.376
D371.372.374-377 1SS252
IC341:ENHANCER
Q342:BUFFER
Q343.Q344:Y.C MIX
CLAMP (SINK CHIP)
LOWER LIMITER1
DIFFERENTIAL CONTROL AMP.
LOWER LIMITER2
ADDITION AMP.
LPF
SWITCH CONTROL
Q341:BUFFER
IC305:ADAPTOR ON/OFF
3.58MHz TRAP FILTER
CROMA BANDPASS FILTER
Q376:BUFFER
Q346:BUFFER
IC306:
ER INPUT SELECTOR
IC304:VCR1 REC SELECTOR
SYNC SEPARATER
Q374:START PULSE
IC371:SPLIT SCREEN CONTROL
VCC
VOLTAGE COMPARATOR
RESET
TRIGGER
CLR
FLIPFLOP
THRESHOLD
CONTROL
DISCHARGE
GND
OUTPUT
IC307:ENHANCER ON/OFF & SPLIT SCREEN SWITCH
IC309:VCR2 REC SELECTOR
IC308:VOLTAGE REGURATOR
Q309.Q310:RF CONVERTER ON/OFF
Q311:BUFFER
AKP-081
RF MOD.
ENHANCER
SPLIT SCREEN
+5
+12
GND
RF MOD.
YO
to VIDEO/SUR /CONTROL ASSEMBLY (1/2) (to page 36)
4
5
6
7
8
9
A
B
C
D

3.7 PRO LOGIC assembly (AWX1025)

(VSX-9500S type only)


PRO LOGIC ASSEMBLY (AWX1025)
IC1510: SURROUND OUTPUT SWITCH
IC1501: TEST TONE SWITCH
Q1501, Q1502: TEST TONE ON/OFF
IC1502: ADAPTIVE MATRIX
(DOLBY LEVEL 220mV)
150mV/10kΩ
DOLBY LEVEL 260mV rms
J12
S OUT
S IN
R IN
GND
L IN
GND
-15V
+15V
to VIDEO/SUR /CONTROL ASSEMBLY CN12 (to page 33)
NOISE SEQUENCER
TEST ON
NOISE TP
IC1507
IC1506(1/2)
IC1508(2/2)
IC1508(1/2)
IC1509
SURROUND CONTROL
IC1512
J20
STB
DATA
CLK
DG
STB.C
to VIDEO/SUR /CONTROL ASSEMBLY CN20 (to page 36)
WIDE
PHANT
NORMAL
CENTER MODE CONTROL
IC1511
PHANTOM
IC1505(1/2)
IC1505(2/2)
IC1504(1/2)
IC1506(2/2)
FULL WAVE
LOG-DIFF
DUAL T.C. CONTROL
COMBINING NETWORK
VCA
SW
1/2 Vcc
Q1503
Q1504
Q1505
Q1506
Q1507
Q1508
D1501
D1502
D1503
D1504
D1505


IC1502: ADAPTIVE MATRIX
NOISE SEQUENCER
SURROUND CONTROL
CENTER MODE CONTROL
Q1501, Q1502: TEST TONE ON/OFF
IC1514: VOLUME BUFFER AMP
IC1513: CENTER ELECTRIC VOLUME
(DOLBY LEVEL 220mV)
150mV/470Ω DOLBY LEVEL 260mV rms
200mV/470Ω DOLBY LEVEL 260mV rms
J19 L OUT GND R OUT
to VIDEO/SUR /CONTROL ASSEMBLY CN19 (to page 33)
J13 C OUT (METER) GND C OUT
to VIDEO/SUR /CONTROL ASSEMBLY CN13 (to page 34)
CN54 GND C IN C OUT
to MOTOR VR ASSEMBLY J11 (to page 31)
FULL WAVE
LOG-DIFF
VCA
SW
COMBINING NETWORK
DUAL T.C. CONTROL
1/2 Vcc
NOISE TP
WIDE
NORMAL
PHANTOM
IC1501
IC1502
IC1503(1/2)
IC1504(1/2)
IC1504(2/2)
IC1505(1/2)
IC1505(2/2)
IC1506(1/2)
IC1506(2/2)
IC1508(1/2)
IC1508(2/2)
IC1509
IC1511
IC1513
IC1514(1/2)
IC1514(2/2)
Q1501
Q1502
Q1503
Q1504
Q1505
Q1507

IC1501, 1510, 1511	BU4066BL
IC1512	CXD1067P
IC1502	LA2770
IC1503, 1514	M5218LF
IC1504−1506, 1508	NJM4558DXP
IC1507	TC4011UBP
IC1509	TC4052BP
IC1513	TC9154AP
Q1503−1505, 1508	RN1203
Q1501, 1506	RN2203
Q1502, 1507	2SA1048
D1501, 1502	RD10ESB2
D1505	RD3.0ESB
D1504	RD5.1ESB
D1503	RD5.6ESB

IC1502

PIN NO.	TERM. NAME
1	R IN
2	BUFFER OUT(R)
3	B.P.F INPUT(R)
4	B.P.F OUTPUT(R)
5	CONTROL OUT(C)
6	CONTROL IN(C)
7	CONTROL OUT(S)
8	CONTROL IN(S)
9	FULL WAVE OUT(S)
10	FULL WAVE OUT(C)
11	S/C LOG.DIFF AMP
12	GND
13	V.REF
14	S/C DUAL TIME
15	S/C TIMING(S)
16	S/C TIMING(F)
17	SURROUND OFF
18	N.C
19	N.C
20	N.C
21	S OUT
22	R OUT
23	CENTER ON/OFF
24	CENTER MODE
25	C OUT
26	L OUT
27	AC GND
28	R/L TIMING(F)
29	R/L TIMING(S)
30	R/L DUAL TIME
31	VCC
32	R/L LOG.DIFF AMP
33	FULL WAVE(R)
34	FULL WAVE(L)
35	CONTROL IN(R)
36	CONTROL OUT(R)
37	CONTROL IN(L)
38	CONTROL OUT(L)
39	B.P.F OUTPUT(L)
40	B.P.F IN(L)
41	BUFFER OUT(L)
42	L IN

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

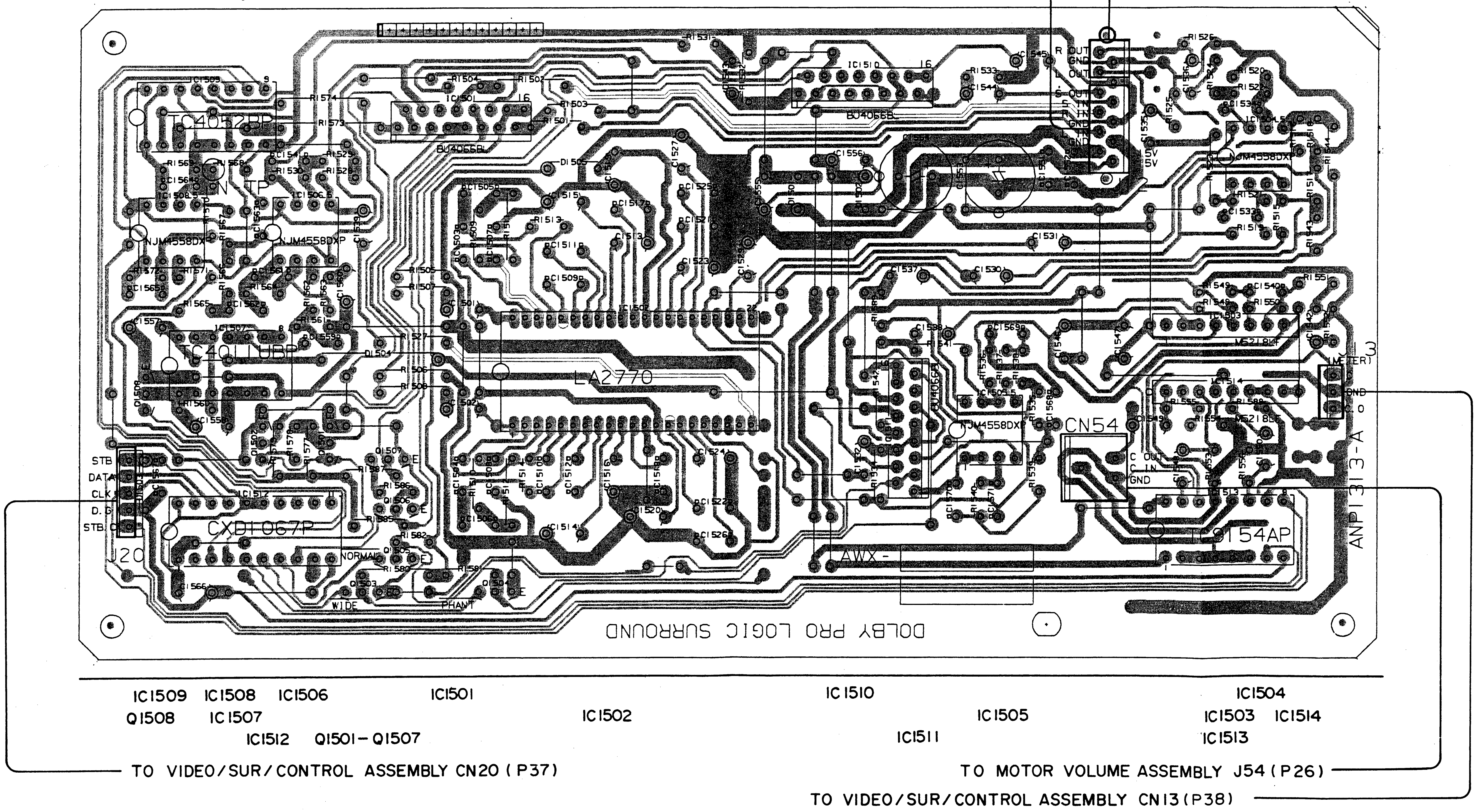
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E Q504	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

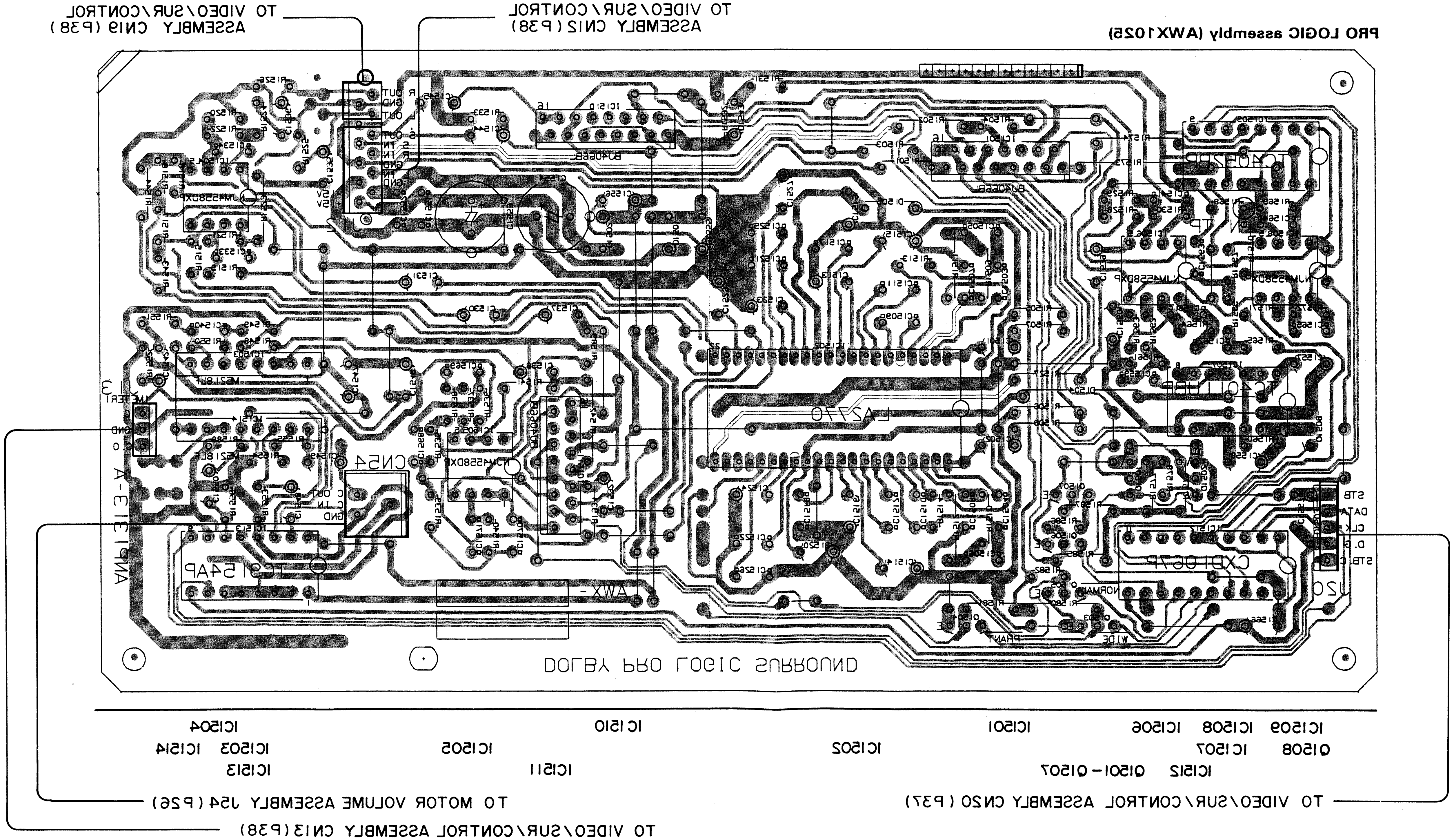
3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

PRO LOGIC assembly (AWX1025)

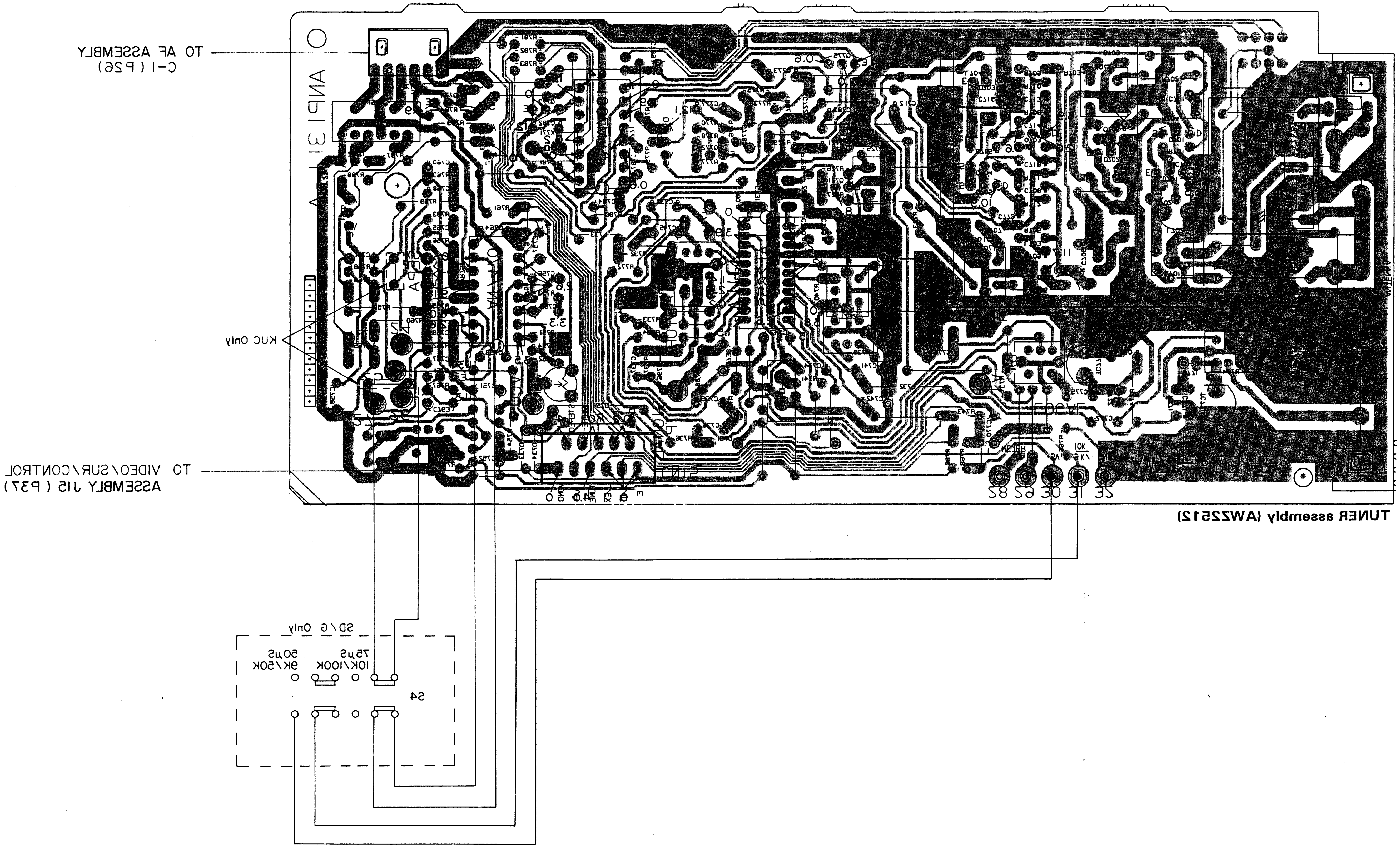

TO VIDEO/SUR/CONTROL ASSEMBLY CN12 (P38)
TO VIDEO/SUR/CONTROL ASSEMBLY CN19 (P38)
TC4052BP
NJM4558DX
NJM4558DXP
TC4011UBP
CXD1067P
BU4066B
LA2770
BU4066B
NJM4558DXP
CN54
M5218L
TC9154AP
ANP1313-A
AWX-
DOLBY PRO LOGIC SURROUND
STB
DATA
CLK
D.G
STB.C
J20
NORMAL
WIDE
PHANT
R OUT
GND
L OUT
C OUT
C IN
GND
METER
IC1509 IC1508 IC1506
Q1508 IC1507
IC1512 Q1501 – Q1507
IC1501
IC1502
IC1510
IC1511
IC1505
IC1504
IC1503 IC1514
IC1513
TO VIDEO/SUR/CONTROL ASSEMBLY CN20 (P37)
TO MOTOR VOLUME ASSEMBLY J54 (P26)
TO VIDEO/SUR/CONTROL ASSEMBLY CN13 (P38)

NOTE:
This picture shows the foil side of the printed circuit.

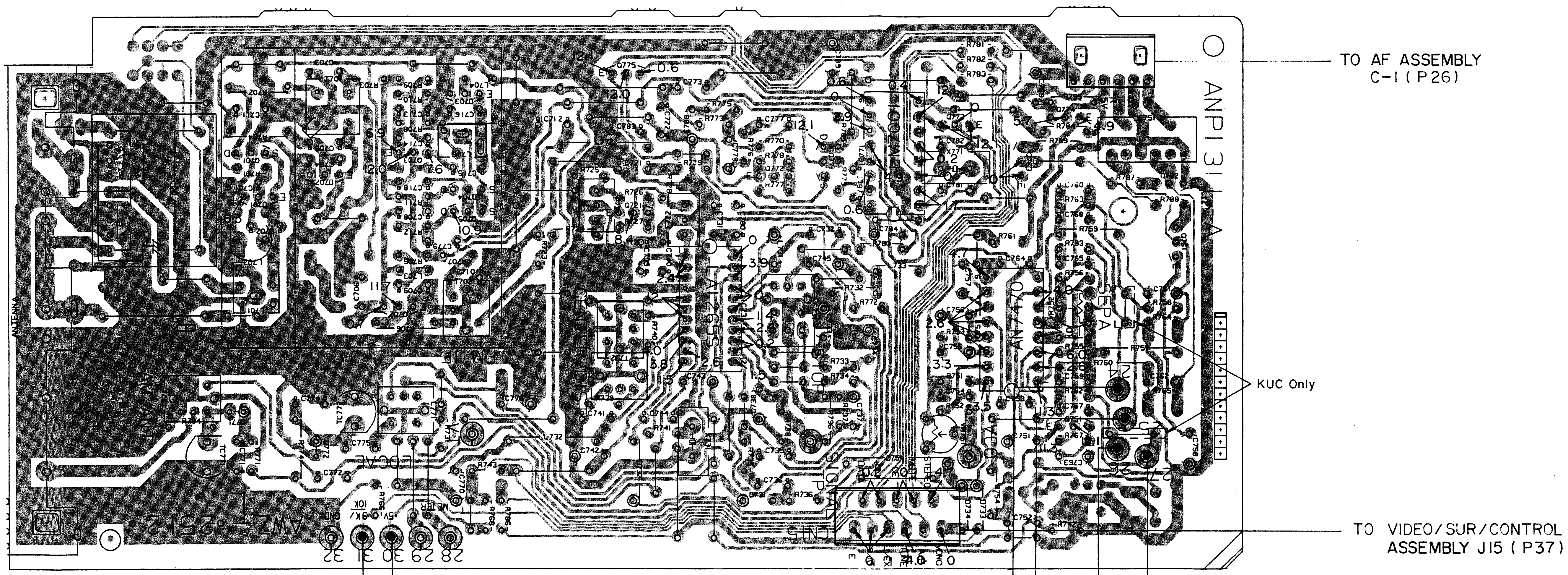
PRO LOGIC assembly (AWX1025)


TO VIDEO/SUR/CONTROL ASSEMBLY CN19 (P38)
TO VIDEO/SUR/CONTROL ASSEMBLY CN12 (P38)
R OUT
GND
OUT
IN
GND
DOLBY PRO LOGIC SURROUND
LA2770
CXD1067P
M5218L
NJM4558DXP
BU4066B
TC9154AP
CN54
C OUT
C IN
GND
METER
STB
DATA
CLK
D.G
PHANT
WIDE
NORMAL
ANP-3131-A
AWX-
IC1504
IC1503 IC1514
IC1513
IC1510
IC1505
IC1511
IC1502
IC1501
IC1509 IC1508 IC1506
Q1508 IC1507
IC1512 Q1501–Q1507
TO MOTOR VOLUME ASSEMBLY J54 (P26)
TO VIDEO/SUR/CONTROL ASSEMBLY CN13 (P38)
TO VIDEO/SUR/CONTROL ASSEMBLY CN20 (P37)

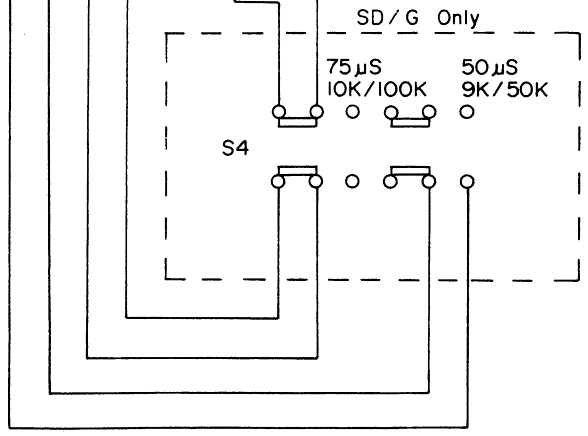
3.8 TUNER assembly (AWZ2512)


TO AF ASSEMBLY
C-1 (P26)
TO VIDEO/SUR/CONTROL
ASSEMBLY J15 (P37)
KUC Only
ANP1131-A
SD/G Only
75µS
10K/100K
50µS
9K/50K
S4
TUNER assembly (AWZ2512)

3.8 TUNER assembly (AWZ2512)

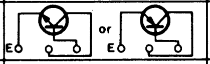
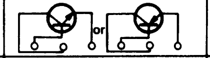
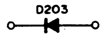
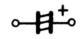
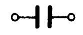

ANTENNA
AM ANT
FM IF
LOCAL
AWZ 2512
ANPI 31
AN7470
SEPA
TO AF ASSEMBLY C-1 (P26)
KUC Only
TO VIDEO/SUR/CONTROL ASSEMBLY J15 (P37)
GND
5K/10K
5V
METER
32 31 30 29 28
CN15

TUNER assembly (AWZ2512)


SD/G Only
75μS
10K/100K
50μS
9K/50K
S4

NOTE

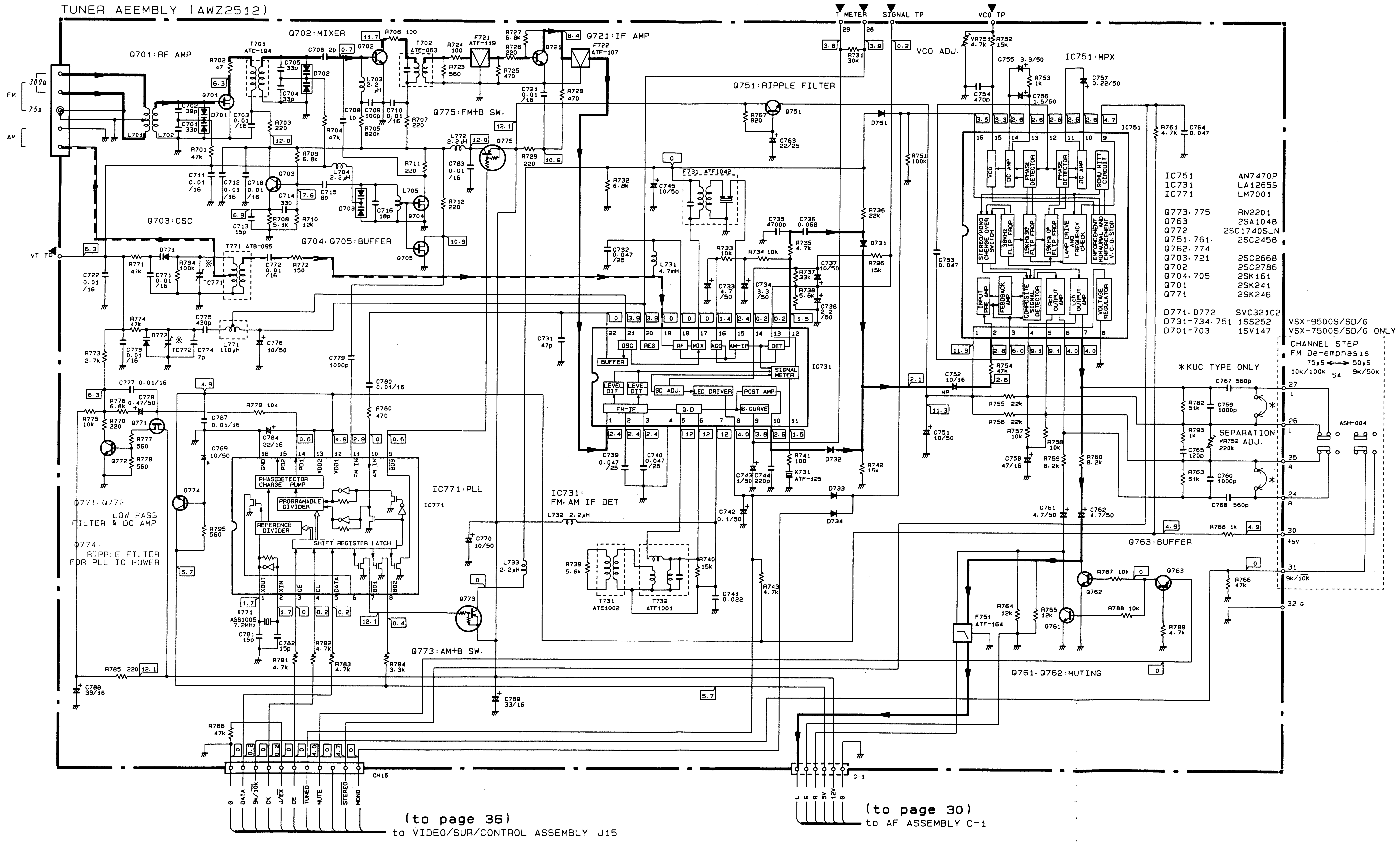
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E Q504		Transistor
Q215		Radiator type transistor
D203	 D203	Diode
R237	R237	Resistor
C513		Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.


TUNER AEEMBLY (AWZ2512)
Q701: RF AMP
Q702: MIXER
Q721: IF AMP
Q703: OSC
Q704, Q705: BUFFER
Q775: FM+B SW.
Q751: RIPPLE FILTER
IC751: MPX
VCO ADJ.
T METER
SIGNAL TP
VCO TP
VT TP
FM
300Ω
75Ω
AM
Q771, Q772 LOW PASS FILTER & DC AMP
Q774: RIPPLE FILTER FOR PLL IC POWER
IC771: PLL
PHASEDETECTOR CHARGE PUMP
PROGRAMABLE DIVIDER
REFERENCE DIVIDER
SHIFT REGISTER LATCH
Q773: AM+B SW.
IC731: FM, AM IF DET
OSC
REG
RF
MIX
AGC
AM-IF
DET
BUFFER
SIGNAL METER
LEVEL DIT
SD ADJ.
LED DRIVER
POST AMP
FM-IF
Q.D
S.CURVE
VCO
DC AMP
PHASE DETECTOR
SCHU MITT CIRCUIT
STEREO/MONO CHANGE OVER SWITCH
38kHz FLIP FLOP
19kHz 90 FLIP FLOP
19kHz 0 FLIP FLOP
LAMP DRIVE AND FREQUENCY CHECK
ENFORCEMENT MONAURAL AND ENFORCEMENT V.C.O. STOP
INPUT PRE AMP
FEEDBACK AMP
COMPOSITE SIGNAL DETECTOR
Rch OUTPUT AMP
Lch OUTPUT AMP
VOLTAGE REGULATOR
IC751 AN7470P
IC731 LA1265S
IC771 LM7001
Q773, 775 RN2201
Q763 2SA1048
Q772 2SC1740SLN
Q751, 761, Q762, 774 2SC2458
Q703, 721 2SC2668
Q702 2SC2786
Q704, 705 2SK161
Q701 2SK241
Q771 2SK246
D771, D772 SVC321C2
D731-734, 751 1SS252
D701-703 1SV147
VSX-9500S/SD/G
VSX-7500S/SD/G ONLY
CHANNEL STEP
FM De-emphasis
75μS ⟷ 50μS
10k/100k S4 9k/50k
*KUC TYPE ONLY
SEPARATION VR752 ADJ.
ASH-004
Q763: BUFFER
Q761, Q762: MUTING
CN15
G DATA 9K/10K CK J/EX CE TUNED MUTE STEREO MONO
C-1
L G R 5V 12V G
(to page 36)
to VIDEO/SUR/CONTROL ASSEMBLY J15
(to page 30)
to AF ASSEMBLY C-1

4. ELECTRICAL PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*
  Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).
  560Ω 56 × 10^1 561..........................RD1/4PS 5⃞ 6⃞ 1⃞ J
  47kΩ 47 × 10^3 473..........................RD1/4PS 4⃞ 7⃞ 3⃞ J
  0.5Ω 0R5...RN2H 0⃞ R⃞ 5⃞ K
  1Ω 010...RS1P 0⃞ 1⃞ 0⃞ K
  Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
  5.62kΩ 562 × 10^1 5621.......................RN1/4SR 5⃞ 6⃞ 2⃞ 1⃞ F

Miscellaneous parts

P.C.BOARD ASSEMBLIES

Mark	Symbol & Description	Part No.
	HEAD PHONE assembly	
	FUSE assembly	
	AF assembly	AWZ2507
	MOTOR VOL assembly	AWZ2509
	VIDEO/SUR/CONTROL assembly	AWZ2511
	TUNER assembly	AWZ2512
	FRONT CONTROL A assembly	AWZ2513
	FRONT CONTROL B assembly	AWZ2514
	METER AMP assembly	AWZ2515
	REAR AMP assembly	AWZ2516
	VOL IND assembly	
	S TERM./CENTER SP assembly	AWK1219
	PRO LOGIC assembly	AWX1025

OTHERS

Mark	Symbol & Description	Part No.
⚠	Q7,Q8,Q10 Transistor	2SA1263N
⚠	Q3,Q4 Transistor	2SA1302
⚠	Q5,Q6,Q9 Transsistor	2SC3180N
⚠	Q1,Q2 Transistor	2SC3281
⚠	Power transformer (AC120V)	ATS1205
⚠	S1 Speaker impedamce selector switch	AKX1004
⚠	FU3,FU4 Fuse (6.3A/125V)	AEK−109
⚠	FU5,FU6 Fuse (1.25A/125V)	AEK−120
⚠	FU1 Fuse (10A/125V)	AEK−310
⚠	3P AC Outlet	AKP−515
⚠	AC Power cord	ADG1031
	Jumper plug	AKM1019

HEAD PHONE assembly

Mark	Symbol & Description	Part No.
	Jack (HEAD PHONE)	AKN1002

FUSE assembly

No parts are supplied with the FUSE assembly

AF assembly (AWZ2507)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC505	M5F79M15L
	IC153	M5201P
	IC151,IC152	M5218LF
	IC165	M5220L
	IC51	M5220P
	IC104	NJM4558DXP
	IC504	NJM78M56FA
	IC201,IC202	PA0016
	IC167	TC9154AP
	IC103	TC9162N
	IC105	TC9163N
	IC101,IC102	TC9164N
	IC168	TC9184P
	IC503	UPC78M05H
	IC502	UPC78M15H
	IC501	UPC7812H
	Q151,Q501,Q508,Q509,Q511	RN1201
	Q512	2SA1048
	Q207,Q208	2SA1145
	Q213,Q214	2SA1306
	Q201,Q202	2SA979
	Q205,Q206,Q215,Q216,Q507	2SC2240
	Q101,Q102,Q502,Q503,Q505, Q506,Q513	2SC2458
	Q209,Q210	2SC2705
	Q211,Q212	2SC3298
	D514	D5SB20F
	D217 Zener diode	RD24EB
	D512 Zener diode	RD4.7ESB
	D165,D166 Zener diode	RD5.1ESB2
	D527 Zener diode	RD5.6ESB2
	D526 Zener diode	RD9.1EB
	D167,D168,D201−D216,D218, D219,D501−D505,D507,D515, D516,D521−D525,D528,D529, D531,D535	1SS252
	D508−D511,D517−D520	11E2
	D513	4D4B44

COILS & TRANSFORMERS

Mark	Symbol & Description	Part No.
	L201,L202 AF choke coil (0.7μH)	ATH1004
	L601,L602 AF choke coil (0.7μH)	ATH1011
	T501 Power transformer	ATT1015

RELAIES

Mark	Symbol & Description	Part No.
	RY503,RY504 Relay	ASR−112
	RY501 Relay	ASR−512
	RY502,RY505 Relay	ASR1005

CAPACITORS

Mark	Symbol & Description	Part No.
	C515−C517 (0.01μF/AC125V)	ACG1003
	C503,C504 (8200μF/DC80)	ACH1106
	C505,C506 (6800μF/DC42)	ACH1110
	C229	CCCSL020C500
	C215,C216	CCCSL101K500
	C225,C226	CCCSL151J50
	C230	CCDSL020C500
	C217,C218	CCDSL101K500
	C171,C172	CCDSL680K500
	C65−C70,C101−C114	CCMSL101J50
	C211−C214	CCMSL680J50
	C219,C220	CEANP2R2M50
	C64,C169,C170,C518,C523, C524,C526	CEAS010M50
	C231−C234	CEAS100M100
	C51,C52,C179,C180,C508, C509,C512	CEAS100M25
	C521,C527	CEAS100M50
	C510	CEAS102M25
	C514	CEAS102M35
	C61,C62,C115−C118,C121, C122,C151,C152,C154,C157, C161,C162,C167,C168	CEAS2R2M50
	C201,C202,C227	CEAS220M50
	C502	CEAS221M10
	C513	CEAS222M35
	C153	CEAS470M16
	C55,C56,C209,C210,C501	CEAS471M6
	C522,C525	CEHAQ010M50
	C507,C511	CEHAQ470M25
	C221−C224,C613,C614	CFTXA104J50
	C123,C124,C177,C178,C181, C182	CFTXA153J50
	C57,C58	CFTXA243J50
	C155	CFTXA333J50
	C59,C60,C183,C184	CFTXA823J50
	C53,C54	CKDYB331K50
	C125,C126,C173,C174,C520	CKDYF103Z50
	C519	CKDYF473Z50
	C63	CKDYX104M25
	C205,C206	CKDYB471K50
	C158	CKMYF222Z50
	C207,C208	CMA270J500
	C203,C204	CQMA152K50
	C175,C176	CQMA272J50
	C156	CQMA332J50
	C119,C120	CQMA392K50
	C191,C192	CQMA472J50

RESISTORS

Mark	Symbol & Description	Part No.
	R508 (2.2M, 1/2W)	ACN−209
	R259,R260 (0.27, 5W×2)	ACN1018
	R217,R218	RDR1/2PM123J
	R201−R204	RDR1/4PM□□□J
	R211−R216,R239−R246 R251−R258,R261−R264, R516−R518,R543,R544,R546, R547,R621−R624	RD1/4PMF□□□J
	R207−R210,R219−R224	RD1/4PM□□□J
	R231−R234,R247−R250	RFA1/4PS□□□J
	R269−R272	RS1LMF100J
	R277,R541,R542	RS2LMF□□□J
	R505,R506	RS3LMF□□□J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	6P Pin jack (TAPE 2, VIDEO, TV, VDP, VCR 1−3, PRE OUT, POWER)	AKB1008
	6P Pin jack (TAPE 1, LINE)	AKB1024
	2P Pin jack (TUNER)	AKB1039
	2P Pin jack (PHONO)	AKB1059

Mark	Symbol & Description	Part No.
	4P Speaker terminal	AKE1007
	8P Speaker terminal	AKE1011
	CN3 6P Jumper connecter	KPC6
	CN1 7P Jumper connecter	KPE7

MOTOR VOL assembly (AWZ2509)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC154	M5220L
	IC671	TA7291S

COIL

Mark	Symbol & Description	Part No.
	F671 EMI filter	ATF1010

CAPACITORS

Mark	Symbol & Description	Part No.
	C159,C160	CEAS2R2M50
	C675	CEJA100M50
	C163,C164	CKDYF103Z50
	C165,C166	CKMYB331K50

RESISTORS

Mark	Symbol & Description	Part No.
	VR671 Variable resistor with motor (100kΩ × 2, 50kΩ × 3)	ACX1016
	Other resistor	RD1/8PM□□□J

VIDEO/SUR/CONTROL assembly (AWZ2511)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC301,IC302,IC304	CX−894
	IC371	HA17555PS
	IC424	LA2730
	IC403	LM3364K−15
	IC402	M50199P
	IC401	M5233P
	IC341	NJM2209S
	IC303,IC305,IC306,IC309	NJM2233BS
	IC307	NJM2235S
	IC421−IC423,IC426, IC428−IC430	NJM4558DXP
	IC391	PDG042
	IC427	TC4066BP
	IC425	TC9154AP
	IC308	UPC78L05
	Q310,Q313−Q316,Q427	RN1203
	Q309	RN2201
	Q424−Q426	RN2203
	Q301,Q304,Q305,Q308,Q373, Q375,Q431	2SA1048

Mark	Symbol & Description	Part No.
	Q302,Q303,Q306,Q307,Q311, Q341−Q344,Q346,Q371,Q372, Q374,Q376,Q391	2SC2458
	Q421,Q422,Q428−Q430	2SC2878
	D425,D426 Zener diode	RD5.1ESB
	D371,D372,D374−D377, D391−D393,D396,D401, D421−D424,D427,D428,D430	1SS252

COILS

Mark	Symbol & Description	Part No.
	L371 Axial inductor (10μH)	LAU100K
	L344,L349,L391,L401,L404 Axial inductor (100μH)	LAU101K
	L341,L345,L346 Axial inductor (220μH)	LAU221K
	L342,L347 Axial inductor (27μH)	LAU270K
	L343,L348 Axial inductor (39μH)	LAU390K
	L372 Axial inductor (47μH)	LAU470K
	L402,L403 inductor (8.2mH)	LTA822J

CAPACITORS

Mark	Symbol & Description	Part No.
	C392 (0.047F/5.5V)	ACH1011
	C346	CCCSL151J50
	C345	CCCSL221J50
	C374	CCMCH220J50
	C352,C362	CCMSL030C50
	C357,C361	CCMSL050C50
	C354	CCMSL060D50
	C341	CCMSL070D50
	C367	CCMSL100D50
	C382	CCMSL101J50
	C365	CCMSL120J50
	C356	CCMSL150J50
	C348,C375,C461	CCMSL220J50
	C343,C355,C371,C379,C380, C381,C455	CCMSL470J50
	C342,C353	CCMSL680J50
	C408	CEANP100M16
	C402	CEANP4R7M35
	C435	CEASR33M50
	C320,C321,C358,C366, C424−C426,C434,C437,C438, C457	CEAS010M50
	C344,C349,C350,C383,C385, C393,C422,C427	CEAS100M50
	C351,C363,C391,C412,C418, C429,C443,C446	CEAS101M10
	C373,C378,C440,C441	CEAS101M16
	C306,C312−C314	CEAS102M10
	C322,C444,C445,C451−C454	CEAS2R2M50

Mark	Symbol & Description	Part No.
	C430,C467	CEAS220M16
	C447-C450,C466,C468,C469	CEAS4R7M50
	C301-C305,C307-C311, C315-C319,C323,C324,C359, C364,C368,C370,C384,C403, C415	CEAS470M16
	C417	CEAS471M10
	C421	CEJA100M16
	C401	CFTXA103J50
	C404,C407,C433	CFTXA104J50
	C459,C460	CFTXA183J50
	C432,C439	CFTXA333J50
	C413,C414	CFTXA823J50
	C369,C394	CGMYX103M16
	C376	CKCYB103K50
	C347	CKCYB472K50
	C411	CKCYF473Z50
	C372	CKCYX104M25
	C471	CKDYB103K50
	C470	CKDYX223M25
	C436	CKMYB471K50
	C431	CQMA472K50
	C406,C409,C458	CQMA562K50
	C423,C428	CQMA682K50
	C405,C410	CQSA561J50
	C377	CQSA821J50

RESISTORS

Mark	Symbol & Description	Part No.
	VR421 (100k)	ACS1020
	VR422 (22k)	VRTB6VS223
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	1P Pin jack (VCR 1)	AKB1010
	3P Pin jack (VDP, TV, VIDEO)	AKB1050
	6P Pin jack (VCR 2, ADAPTOR, VCR 3)	AKB1058
	6P Pin jack (REAR,CENTER)	AKB1093
	2P Mini jack (REMOTE)	AKN1006
	5P DIN socket (RF MOD)	AKP-081
	X401 Ceramic resonator (3.27MHz)	ASS1016
	X391 Ceramic resonator (4.19MHz)	ASS1022
	CN13 3P Jumper connecter	KPC3
	CN20 5P Jumper connecter	KPC5
	CN6 10P Jumper connecter	KPE10
	CN9,CN11 12P Jumper connecter	KPE12
	CN5,CN10 15P Jumper connecter	KPE15
	CN19 3P Jumper connecter	KPE3
	CN12 8P Jumper connecter	KPE8

TUNER assembly (AWZ2512)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC751	AN7470P
	IC731	LA1265S
	IC771	LM7001
	Q773,Q775	RN2201
	Q763	2SA1048
	Q772	SC1740SLN
	Q751,Q761,Q762,Q774	2SC2458
	Q703,Q721	2SC2668
	Q702	2SC2786
	Q704,Q705	2SK161
	Q701	2SK241
	Q771	2SK246
	D771,D772	SVC321C2
	D731-D734,D751	1SS252
	D701-D703	1SV147

COILS & TRANSFORMERS

Mark	Symbol & Description	Part No.
	T771 AM antenna transformer	ATB-095
	L771 AM OSC coil (110μH)	ATB-100
	T701 FM RF transformer	ATC-194
	L701 FM coil	ATC1001
	L702 FM coil	ATC1002
	L705 FM coil	ATC1003
	T702 FM coupling transformer	ATE-063
	T732 FM detector transformer	ATE1001
	T731 FM detector transformer	ATE1002
	F722 FM Ceramic filter	ATF-107
	F721 FM Ceramic filter	ATF-119
	F751 Low pass filter	ATF-164
	F731 AM Ceramic filter	ATF1042
	L703,L704,L732,L733,L772 Axial inductor (2.2μH)	LAU2R2M
	L731 Inductor (4.7mH)	LTA472J

CAPACITORS

Mark	Symbol & Description	Part No.
	TC771,TC772	ACM-015
	C708	CCDCH010C50
	C706	CCDCH020C50
	C701,C704,C705	CCDRH330J50
	C702	CCDRH390J50
	C744	CCDSL221J50
	C716	CCDTH180J50
	C774	CCMCH070D50
	C715	CCMCH080D50
	C713,C781,C782	CCMCH150J50
	C714	CCMCH330J50
	C709	CCMSL101J50
	C765	CCMSL121J50
	C731	CCMSL470J50
	C752	CEANP100M16

Mark	Symbol & Description	Part No.
	C757	CEASR22M50
	C778	CEASR47M50
	C742	CEASOR1M50
	C743	CEAS010M50
	C756	CEAS1R5M50
	C737,C745,C751,C769,C770, C776	CEAS100M50
	C738	CEAS2R2M50
	C784	CEAS220M16
	C763	CEAS220M25
	C734,C755	CEAS3R3M50
	C788,C789	CEAS330M16
	C733,C761,C762	CEAS4R7M50
	C758	CEAS470M16
	C736	CFTXA683J50
	C703,C710−C712,C718,C721, C722,C771−C773,C777,C780, C783,C787	CGMYX103M16
	C735	CKCYB472K50
	C753,C764	CKCYF473Z50
	C732,C739,C740	CKCYX473M25
	C741	CKDYF223Z50
	C779	CKMYB102K50
	C759,C760	CQMA102J50
	C767,C768	CQMA561K50
	C775	CQSA431J50
	C754	CQSA471J50

RESISTORS

Mark	Symbol & Description	Part No.
	R752	RN1/4PC1502F
	VR752 Semi−fixed resistor (220k)	VRTB6VS224
	VR751 Simi−fixed resistor (4.7k)	VRTB6VS472
	Other resistors	RD1/8PM□□□J

OTHER

Mark	Symbol & Description	Part No.
	4P Antenna terminal	AKA1003
	X771 Crystal resonator (7.2MHz)	ASS1005
	X731 Ceramic resonator (450kHz)	ATF−125
	CN15 11P Jumper connecter	KPE11

FRONT CONTROL A assmbly (AWZ2513)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC801	PDG041
	Q801	RN1203
	Q812	RN2203
	Q802−Q811	2SC2458
	D801−D817	1SS252

COIL

Mark	Symbol & Description	Part No.
	L801 Axial inductor (10μH)	LAU100K

SWITCHES

Mark	Symbol & Description	Part No.
	S815−S822,S825,S827−S830, S838−S844,S846−S849, S852−S855,S857−S860,S863, S864 Tact switch	ASG−711
	S801−S814,S826,S834−S837, S845,S850,S851,S856,S861, S862,S865	ASG1029

CAPACITORS

Mark	Symbol & Description	Part No.
	C801,C802	CCDCH101J50
	C807	CEJA0R1M50
	C803,C805,C806	CEJA100M16

RESISTORS

Mark	Symbol & Description	Part No.
	VR802 Variable resistor (10k)	ACS1021
	VR801 Variable resistor (10k)	ACS1022
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	V801 Fluorescent indicator tube	AAV1080
	X801 Seramic oscillator (503kHz)	ASS1004
	REMOCON REC unit	AXX1010

FRONT CONTROL B assembly (AWZ2514)

SWITCHES

Mark	Symbol & Description	Part No.
	S823,S824,S831−S833,S866, S867 Tact switch	ASG1029

METER AMP assembly (AWZ2515)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC631−IC633	M5218LF
	Q631−Q635	2SC2458
	D641−D645 Zener diode	RD5.6ESB3
	D636−D640	1SS252

CAPACITORS

Mark	Symbol & Description	Part No.
	C631−C635	CEASR47M50

RESISTORS

Mark	Symbol & Description	Part No.
	All resistors	RD1/8PM□□□J

OTHER

Mark	Symbol & Description	Part No.
	CN18 5P Jumper connecter	KPE5

REAR AMP assembly (AWZ2516)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC601−IC603	UPC1270H
	Q601−Q603	2SC2458

CAPACITORS

Mark	Symbol & Description	Part No.
	C607,C608,C622	CCMSL270J50
	C615,C616,C623	CEAS100M50
	C601,C602,C619	CEAS2R2M50
	C609,C610	CEHAQ100M50
	C605,C606,C621	CEHAQ101M10
	C611,C612,C624	CFTXA333J50
	C625	CKDYF103Z50
	C603,C604,C620	CKMYB102K50
	C617,C618	CKMYB471K50

RESISTORS

Mark	Symbol & Description	Part No.
	R619,R620,R629 (0.22, 2W×2)	ACN−131
	Other resistors	RD1/8PM□□□J

VOL IND assembly (AWZ2517)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	D761 LED	AEL1053

OTHERS

Mark	Symbol & Description	Part No.
	Terminal board	AKF1006

S TERM./CENTER SP assembly (AWK1219)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC901,IC902	CX−894
	IC903,IC904	NJM2233BS
	IC906	NJM79M05FA
	IC905	TC4081BP
	Q926	RN1201
	Q901,Q904,Q907,Q908,Q912, Q915,Q916,Q920,Q923	2SA1048
	Q903,Q910,Q918	2SC1740S
	Q902,Q905,Q906,Q909,Q911, Q913,Q914,Q917,Q919,Q921, Q922	2SC2458
	Q924,Q925	2SC2878
	D901−D924	1SS252

COIL

Mark	Symbol & Description	Part No.
	L901 AF Choke coil (0.7μH)	ATH1011

RELAY

Mark	Symbol & Description	Part No.
	RY901 Relay	ASR1005

CAPACITORS

Mark	Symbol & Description	Part No.
	C931−C933	CCMSL020C50
	C911,C913,C915	CCMSL070D50
	C912,C914,C916	CCMSL080D50
	C910,C918	CEAS010M50
	C905,C919,C920,C925	CEAS101M16
	C939	CEAS470M16
	C930	CEAS2R2M50
	C901−C904,C907−C909,C917, C921−C924	CEAS470M16
	C926	CFTXA104J50
	C934−C936	CKCYX104M25
	C927−C929	CKDYF103Z50
	C937,C938	CCMSL680J50

RESISTORS

Mark	Symbol & Description	Part No.
	R958,R959	RD1/4PMF4R7J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	2P Speaker terminal (Center SP)	AKE−058
	Mini jack (MULTI ROOM)	AKN1020
	4P Mini DIN socket (VDP, VCR1−2, MONITOR)	AKP1016
	CN51−CN53 3P Jumper connecter	KPC3
	CN60 12P Jumper connecter	KPE12

PRO LOGIC assembly (AWX1025)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC1501,IC1510,IC1511	BU4066BL
	IC1512	CXD1067P
	IC1502	LA2770
	IC1503,IC1514	M5218LF
	IC1504–IC1506,IC1508	NJM4558DXP
	IC1507	TC4011UBP
	IC1509	TC4052BP
	IC1513	TC9154AP
	Q1503–Q1505,Q1508	RN1203
	Q1501,Q1506	RN2203
	Q1502,Q1507	2SA1048
	D1501,D1502 Zener diode	RD10ESB2
	D1505 Zener diode	RD3.0ESB
	D1504 Zener diode	RD5.1ESB
	D1503 Zener diode	RD5.6ESB

CAPACITORS

Mark	Symbol & Description	Part No.
	C1533,C1534,C1564	CCMSL220J50
	C1540,C1541,C1565	CCMSL330J50
	C1513–C1516,C1523,C1524	CEANL4R7M50
	C1558	CEANP010M50
	C1529–C1532,C1535–C1539 C1542–C1545,C1560,C1566	CEAS100M50
	C1519,C1546,C1547,C1557	CEAS101M16
	C1550	CEAS2R2M50
	C1553,C1554	CEAS331M16
	C1501,C1502,C1548,C1549	CEAS4R7M50
	C1520,C1527,C1555,C1556	CEAS470M10
	C1559	CFTXA103J50
	C1503–C1506,C1568,C1569, C1571	CFTXA104J50
	C1510,C1512	CFTXA154J50
	C1521,C1522,C1525,C1526, C1562,C1563,C1570	CFTXA224J50
	C1509,C1511	CFTXA334J50
	C1567	CKDYB222K50
	C1561	CKMYB152K50
	C1551,C1552	CKMYF472Z50
	C1507,C1508	CQMA681J50
	C1517,C1518	CQMA682J50

RESISTORS

Mark	Symbol & Description	Part No.
	All resistors	RD1/8PM☐☐☐J

OTHER

Mark	Symbol & Description	Part No.
	CN54 3P Jumper connecter	KPE3

5. ADJUSTMENTS

5.1 TUNER SECTION

FM Tuner section

- Connect the FM signal generator (FM SG) to the FM ANTENNA 300Ω terminal through a 300Ω dummy antenna.
- Set the AUTO/MANUAL TUNING selector switch to the MANUAL position and the FUNCTION switch to the FM.

FM MONO ADJUSTMENT

Step	FM SG (1kHz±75kHz dev.)		Frequency display	Adjustment point	Adjustment procedure
	Frequency	Level			
1	No signal		87.5MHz	——	Check TP-VT (3.4±1.5V) of tuner aassembly.
2			108MHz	——	Check TP-VT ($8.7^{+2.5V}_{-2.0V}$) of tuner assembly.
3	98MHz	20~30dB	98MHz	T701,L702, T702	Set the output from SIGNAL TP of assembly to maxium level.
4	98MHz	60dB	98MHz	T732	Adjust so that voltage between pins 28 and 29 (T METER) of assembly is within ±10mV.
5	98MHz	60dB	98MHz	T731	Minimize distortion.
6	Repeat steps 4 and 5 until both specification ratings are staisfied.				

FM MPX ADJUSTMENT

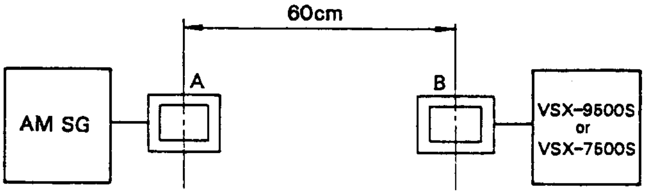
7	98MHz	80dB	98MHz	VR751	Adjust the freqency at pin TP−VCO of tuner assembly to 76.0kHz (±100Hz)
	No modulation				
8	98MHz	80dB	98MHz	T702	Minimize distortion in both left and right channel outputs (adjust T702 to within ±90°)
	Stereo modulation*				
9	98MHz	60dB	98MHz	VR752	Maximize separation.
	Stereo modulation*				
10	98MHz	10dB	98MHz	——	Confirm that TUNED IND and STEREO IND are extinguished.
	Stereo modulation*				
* Stereo modulation:Main 1kHz L+R±68.25kHz dev. Pilot 19kHz±6.75kHz dev.					

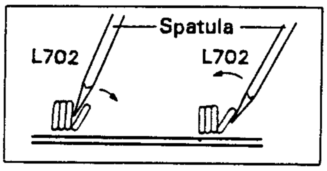
AM (MW) Tuner section

- Connect loop antenna to the AM signal generator (AM SG) and connect the LOOP aantenna (of the set) to AM ANTANNA terminal.
- Set the FUNCTION switch to the AM (MW).

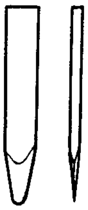
Step	AM SG (400Hz, 30% MOD)		Frequency display	Adjustment point	Adjustment procedure
	Frequency	Level			
1	No signal		530kHz	L771	Set TP−VT of tuner assembly to 1.2V (±0.05V)
2			1700kHz	TC772	Set TP−VT of tuner assembly to 10.0V (±0.1V)
3	Repeat steps 1 and 2 until both specification ratings are staisfied.				
4	600kHz	40dB	600kHz	T771	Set the output from TP−SIGNAL of tuner assembly to maximum level.
5	1400kHz	40dB	1400kHz	TC771	
6	Repeat steps 4 and 5 until both specification ratings are staisfied.				
7	1000kHz	60dB	1000kHz		Confirm that TUNER IND becomes lit.

- The distance between AM SG side loop antenna A and the receiver side (VSX-9500S or VSX-7500S) loop antenna B, that is, from the center of A side loop antenna to that of B side loop antenna should be 60cm.


60cm
A
B
AM SG
VSX-9500S
or
VSX-7500S

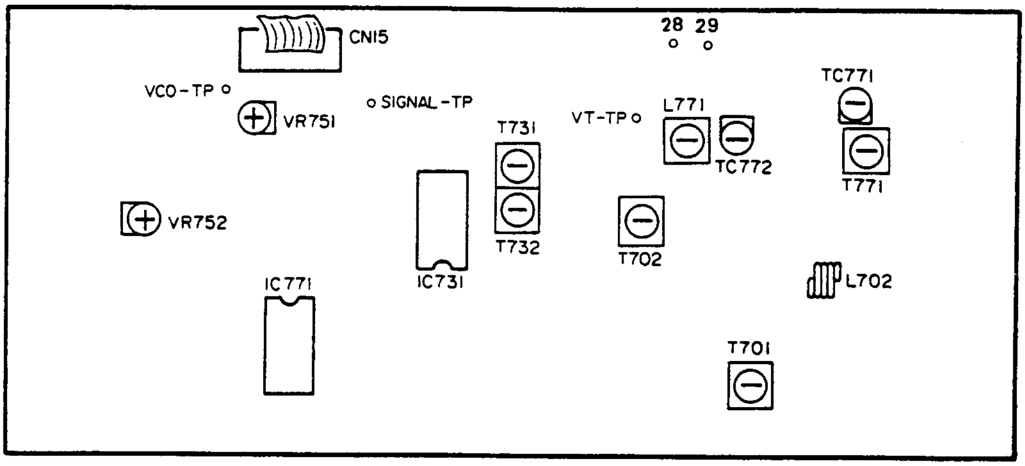

Spatula
L702
L702

Adjust by making this space between windings of a coil wider or closer with a spatula.



Spatula

Use a spatula whose an edges is thin.


CN15
28 29
VCO-TP
SIGNAL-TP
VR751
T731
VT-TP
L771
TC771
TC772
T771
VR752
T732
T702
IC771
IC731
L702
T701

TUNER assembly (AWZ2512)

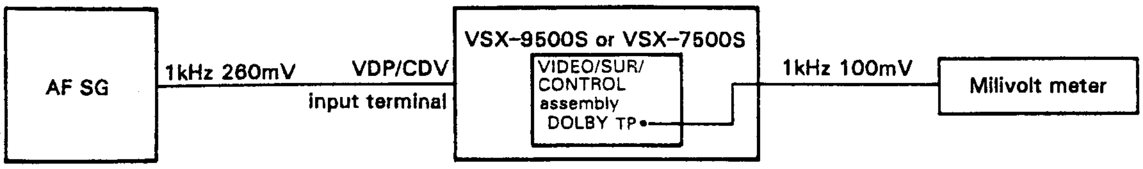
5.2 SURROUND AMP SECTION

- **SORRUND LEVEL ADJUSTMENT Preparation**

1) Adjust the SURROUND BALANCE VR (VR421) on the rear side to center clicking position.
2) Set the SURROUND MODE to the DOLBY SURROUND (VSX-7500S type)

* Set the SURROUND MODE to the STADIUM (VSX-9500S type)

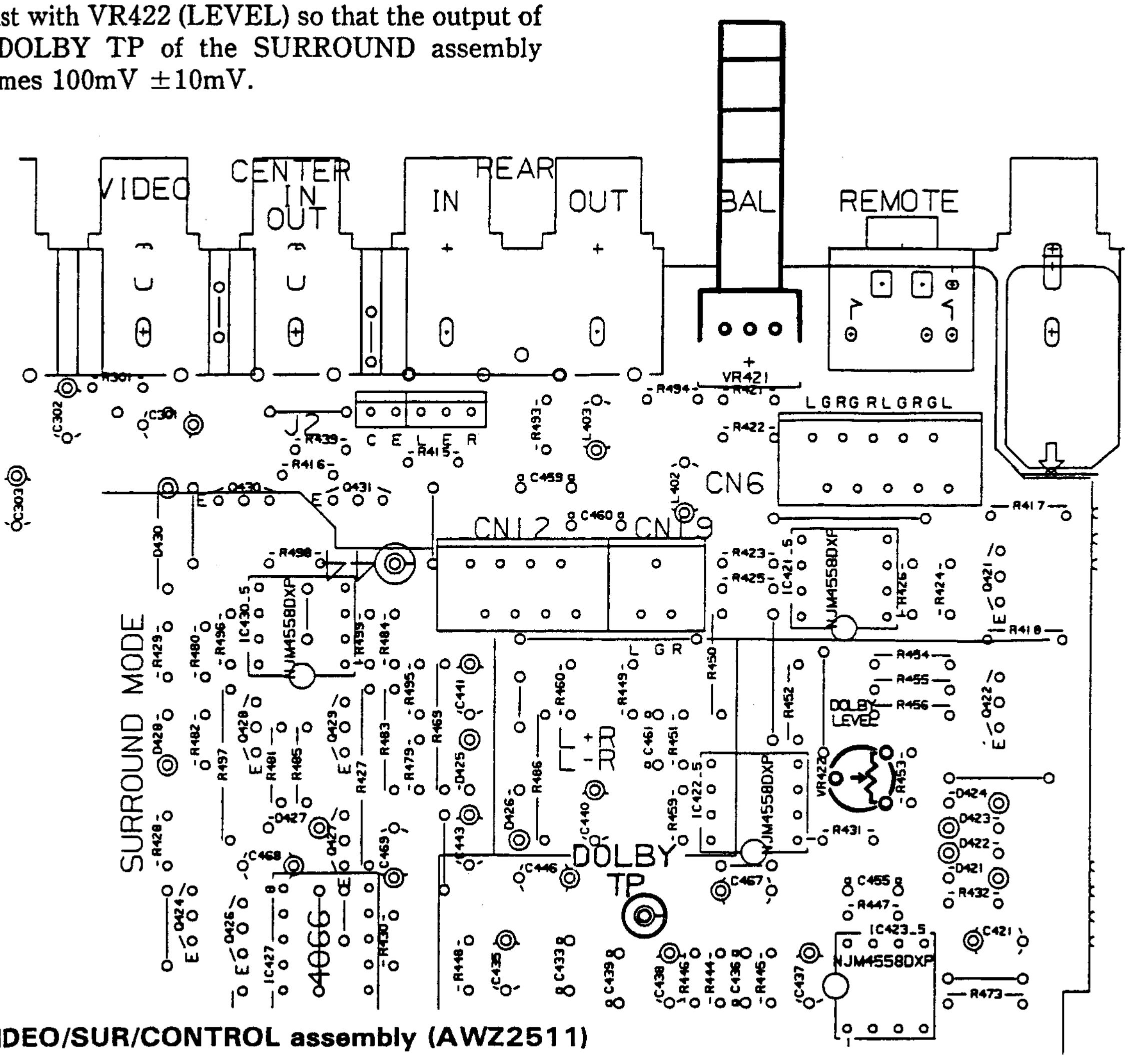
3) Input sine wave signal of 1kHz, 260mV to the VDP/CDV input. Lch (or Rch) only.


AF SG
1kHz 260mV
VDP/CDV
input terminal
VSX-9500S or VSX-7500S
VIDEO/SUR/
CONTROL
assembly
DOLBY TP
1kHz 100mV
Milivolt meter

Connection diagram

Adjusting method

1) Adjust with VR422 (LEVEL) so that the output of TP DOLBY TP of the SURROUND assembly becomes 100mV ±10mV.


VIDEO
CENTER
IN
OUT
REAR
IN
OUT
BAL
REMOTE
VR421
CN6
CN12
CN9
SURROUND MODE
NJM4558DXP
4066
DOLBY LEVEL
VR422
DOLBY
TP
L G R G R L G R G L
C E L E R

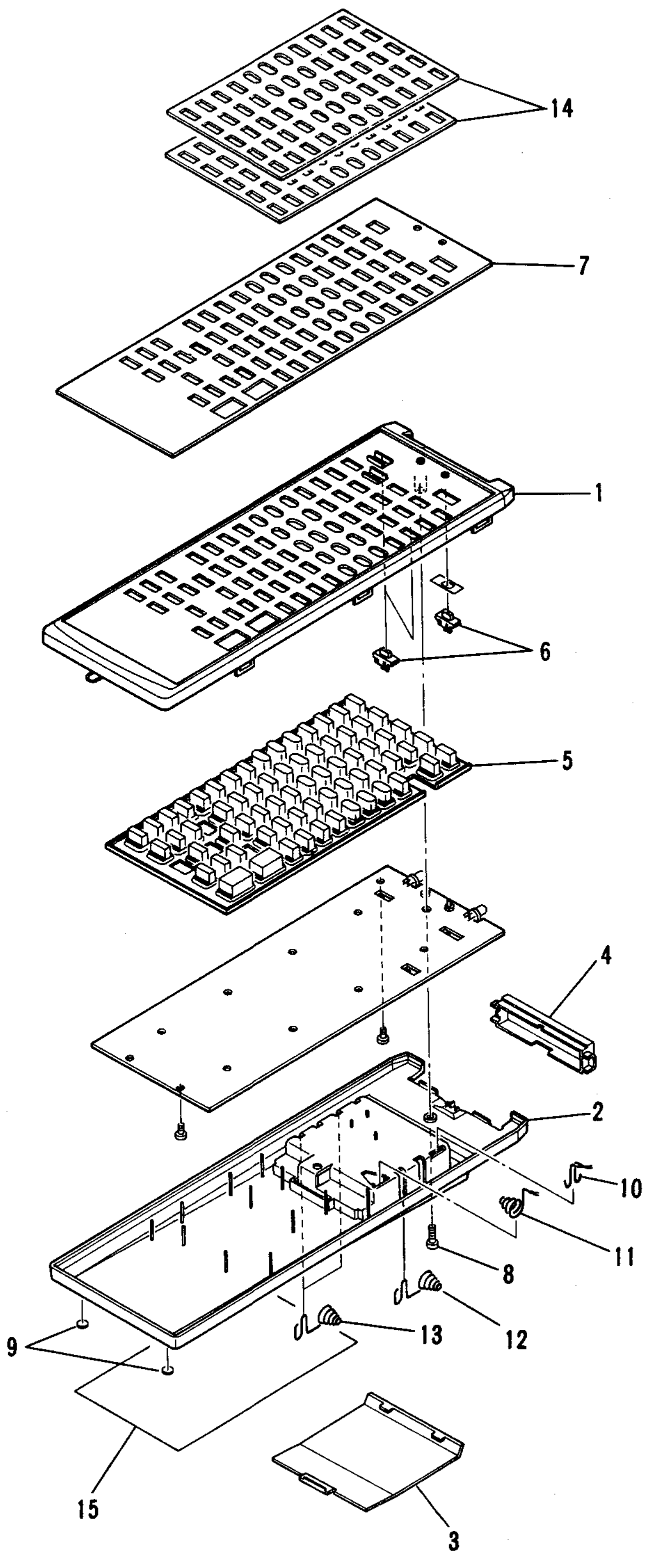
VIDEO/SUR/CONTROL assembly (AWZ2511)

6. REMOTE CONTROL UNIT (AXD1100)

6.1 EXPLODED VIEWS AND PARTS LIST

Parts list of remote control unit

Mark	No.	Parts No.	Description
	1	AZH1033	Case(A)
	2	AZH1034	Case(B)
	3	AZH1035	Case(C)
	4	AZN1400	Filter
	5	AZA1192	Rubber sheet
	6	AZS1042	Knob
	7	AZA1190	Name plate
	8	AZB1124	Screw
	9	AZN1401	Leg
	10	AZB1274	Electrode spring
	11	AZB1275	Electrode spring
	12	AZB1276	Electrode spring
	13	AZB1277	Electrode spring
	14	AAK1439	Sheet
	15	AZA1191	Label



6.2 ELECTRICAL PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*
  Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).
  560Ω 56 × 10¹ 561..........................RD1/4PS 5 6 1 J
  47kΩ 47 × 10³ 473..........................RD1/4PS 4 7 3 J
  0.5Ω 0R5..RN2H 0 R 5 K
  1Ω 010..RS1P 0 1 0 K
  Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
  5.62kΩ 562 × 10¹ 5621........................RN1/4SR 5 6 2 1 F

SEMCONDUCTORS

Mark	Symbol & Description	Part No.
	IC01	PD5108
	IC02	AZC1045
	IC03	AZC1046
	IC04	AZC1047
	IC05	AZC1048
	Q1,Q2	AZC1050
	Q3,Q4	AZC1051
	Q5	AZC1052
	D01,D02,D07−D15	AZC1233
	D03−D06	AZC1049
	PHD01	AZC1055
	LED01,LED02	AZC1054
	IED01,IED02	AZC1053

SWITCHES

Mark	Symbol & Description	Part No.
	S01,S02 Slide switch	AZC1079
	S04 Slide switch	AZC1081
	S05 Slide switch	AZC1080

CAPACITORS

Mark	Symbol & Description	Part No.
	C01 (220p)	AZC1058
	C02 (33p)	AZC1059
	C05,C06 (20p)	AZC1060
	C08 (0.01μF)	AZC1061
	C03,C04 (0.001μF)	AZC1062
	C11 (0.01μF)	AZC1063
	C10 (100μF)	AZC1251
	C07 (4.7μF)	AZC1252
	C09 (1000μF)	AZC1255

RESISTORS

Mark	Symbol & Description	Part No.
	R01 (8.2k)	AZC1064
	R02 (4.7k)	AZC1065
	R03,R08 (33k)	AZC1066
	R05,R17 (10k)	AZC1068
	R06 (82k)	AZC1069
	R09 (6.8k)	AZC1070
	R10 (56k)	AZC1071
	R12 (1M)	AZC1072
	R07,R11,R30−R38 (100k)	AZC1073
	R19−R21 (2.2k)	AZC1074
	R13,R16 (680Ω)	AZC1075
	R15 (10Ω)	AZC1076
	R18,R22−R29 (47k)	AZC1077
	R14 (3.9Ω)	AZC1078
	R04 (560k)	AZC1256

OTHERS

Mark	Symbol & Description	Part No.
	X01 Resonator	AZC1057

6.3 SCHEMATIC DIAGRAM

1. RESISTORS:
Indicated in Ω, ¼W, ⅛W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M); ±20% tolerance

2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.

3. OTHERS:
➡ : Signal route.
⊘ : Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

The underline indicates the switch position

S01 : AUDIO/VIDEO/AUX
S02 : SR RECALL/USE/LEARN
S03 : DECK I/DECK II
S04 : RESET

TAPE/VCR
S−1 : VCR POWER
S−2 : ● TAPE/VCR
S−3 : ❚❚ TAPE/VCR
S−4 : O/VCR CH−
S−5 : VCR CH+
S−6 : ◀◀
S−7 : ◀/ANT/ TV/VCR
S−8 : ■
S−9 : ▶
S−10 : ▶▶

CD/VDP
S−11 : DISC SEL /DISPLAY CALL
S−12 : ❚❚
S−13 : ⏮ CHP/FR−TM
S−14 : ⏭ /SEARCH
S−15 : PROG
S−16 : ◀◀
S−17 : ■
S−18 : ▶
S−19 . ▶▶

TUNER/CD/TV/VDP
S−20 : 1/13
S−21 : 2/14
S−22 : 3/15
S−23 : 4/16
S−24 : 5/17
S−25 : 6/18
S−26 : 7/19
S−27 : 8/20
S−28 : 9/21
S−29 : 0, 10/22
S−30 : 11/MEMORY/23
S−31 : 12/CLEAR/24

TUNER/CD/PHONO/AMP/TV
S−32 : BAND/DUAL

S−36 : 1·12/13·24/CH−RETURN
S−37 : FREQUENCY−/TV CHANNEL−
S−38 : FREQUENCY+/TV CHANNEL+
S−39 : TV POWER
S−40 : CD+10/ TV FUNC CYCLIC
S−41 : PHONO ■/TV VOL−
S−42 : PHONO ▶/TV VOL+
S−43 : AMP DISPLAY/TV DISPLAY
S−44 : VCR 1
S−45 : VCR 2
S−46 : VCR 3
S−47 : VDP
S−48 : TV
S−49 : VIDEO

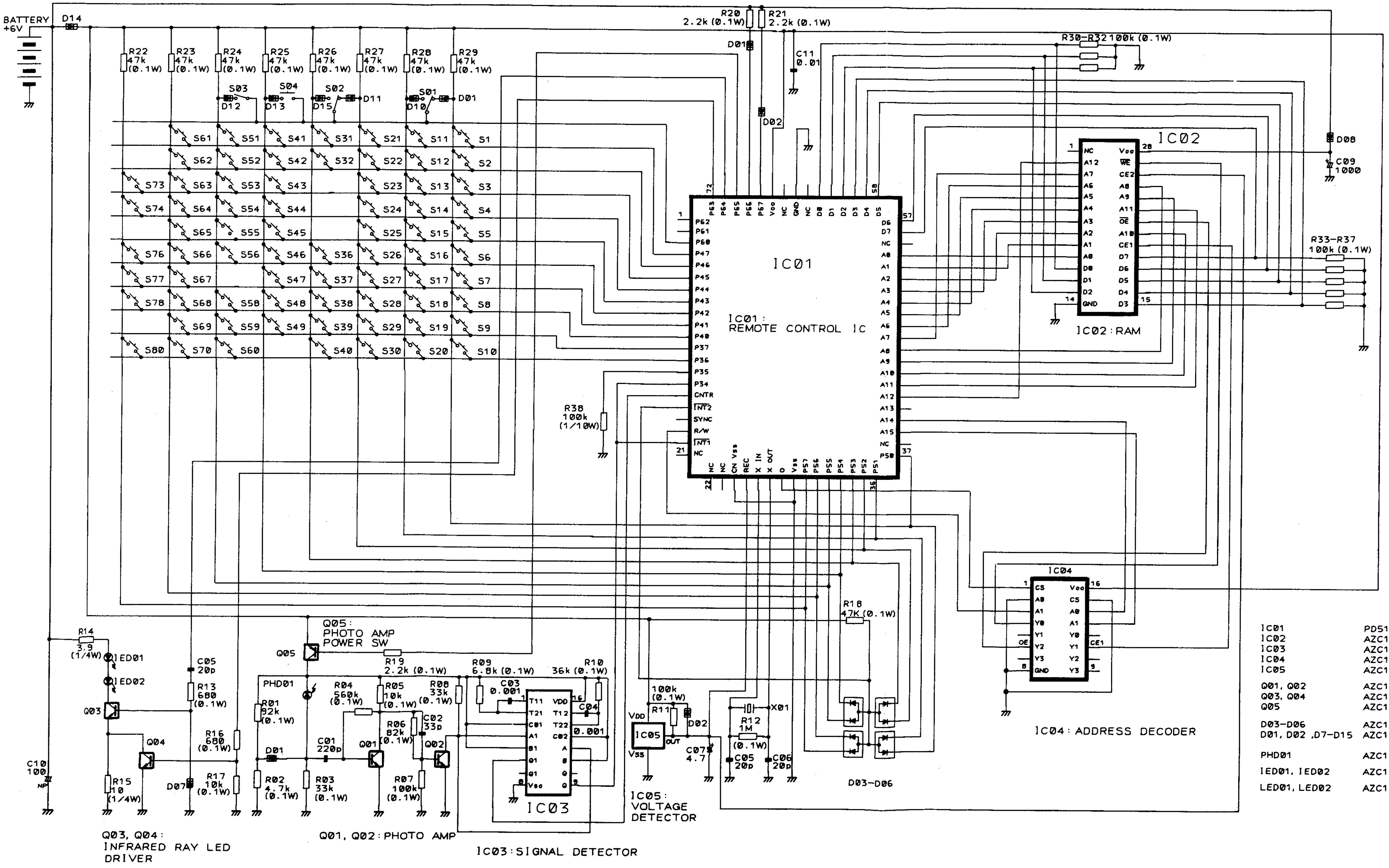
S−51 : TAPE 1/DAT
S−52 : TAPE 2
S−53 : LINE
S−54 : CD
S−55 : TUNER
S−56 : PHONO

S−58 : SLEEP
S−59 : RECEIVER POWER
S−60 : MUTING
S−61 : FRONT BAL.R
S−62 : FRONT BAL.L
S−63 : MASTER VOLUME−
S−64 : MASTER VOLUME+
S−65 : REAR LEVEL−
S−66 : REAR LEVEL+
S−67 : SURROUND MODE
S−68 : SURROUND DELAY TIME
S−69 : REAR BAL.R
S−70 : REAR BAL.L

S−73 : CENTER LEVEL−
S−74 : CENTER LEVEL+

S−76 : ACOUSTIC
S−77 : SP−A
S−78 : SP−B

S−80 : RETURN


BATTERY
+6V
D14
R20
2.2k (0.1W)
R21
2.2k (0.1W)
D01
C11
0.01
R22 47k (0.1W)
R23 47k (0.1W)
R24 47k (0.1W)
R25 47k (0.1W)
R26 47k (0.1W)
R27 47k (0.1W)
R28 47k (0.1W)
R29 47k (0.1W)
S03
S04
S02
S01
D12
D13
D15
D11
D10
D01
D02
S61 S51 S41 S31 S21 S11 S1
S62 S52 S42 S32 S22 S12 S2
S73 S63 S53 S43 S23 S13 S3
S74 S64 S54 S44 S24 S14 S4
S65 S55 S45 S25 S15 S5
S76 S66 S56 S46 S36 S26 S16 S6
S77 S67 S47 S37 S27 S17 S7
S78 S68 S58 S48 S38 S28 S18 S8
S69 S59 S49 S39 S29 S19 S9
S80 S70 S60 S40 S30 S20 S10
IC01
IC01 : REMOTE CONTROL IC
1
21
22
36
37
57
58
72
P63 P64 P65 P66 P67 VDD NC GND NC D0 D1 D2 D3 D4 D5
P62 P61 P60 P47 P46 P45 P44 P43 P42 P41 P40 P37 P36 P35 P34 CNTR INT2 SYNC R/W INT1 NC
D6 D7 NC A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14 A15 NC P50
NC NC CN VSS REC X IN X OUT O VSS P57 P56 P55 P54 P53 P52 P51
R30−R32 100k (0.1W)
IC02
IC02 : RAM
1
14
15
28
NC A12 A7 A6 A5 A4 A3 A2 A1 A0 D0 D1 D2 GND
VDD WE CE2 A8 A9 A11 OE A10 CE1 D7 D6 D5 D4 D3
D08
C09
1000
R33−R37
100k (0.1W)
R38
100k
(1/10W)
IC04
1
8
9
16
CS A0 A1 Y0 Y1 Y2 Y3 GND
VDD CS A0 A1 Y0 Y1 Y2 Y3
OE
CE1
IC04 : ADDRESS DECODER
R18
47K (0.1W)
D03−D06
R14
3.9
(1/4W)
IED01
IED02
Q03
Q04
C05
20p
R13
680
(0.1W)
R16
680
(0.1W)
R17
10k
(0.1W)
C10
100
NP
R15
10
(1/4W)
D07
Q03, Q04 :
INFRARED RAY LED
DRIVER
Q05 :
PHOTO AMP
POWER SW
Q05
R19
2.2k (0.1W)
R09
6.8k (0.1W)
R10
36k (0.1W)
PHD01
R01
82k
(0.1W)
R04
560k
(0.1W)
R05
10k
(0.1W)
R08
33k
(0.1W)
C03
0.001
C02
33p
R06
82k
(0.1W)
C01
220p
Q01
Q02
D01
R02
4.7k
(0.1W)
R03
33k
(0.1W)
R07
100k
(0.1W)
C04
0.001
T11 T21 C01 A1 B1 Q1 Q1 VSS
VDD T12 T22 C02 A B Q Q
16
IC03
Q01, Q02 : PHOTO AMP
IC03 : SIGNAL DETECTOR
100k
(0.1W)
R11
D02
VDD
IC05
VSS
OUT
C07
4.7
IC05 :
VOLTAGE
DETECTOR
X01
R12
1M
(0.1W)
C05
20p
C06
20p

IC01	PD5108
IC02	AZC1045
IC03	AZC1046
IC04	AZC1047
IC05	AZC1048
Q01, Q02	AZC1050
Q03, Q04	AZC1051
Q05	AZC1052
D03−D06	AZC1049
D01, D02 ,D7−D15	AZC1233
PHD01	AZC1055
IED01, IED02	AZC1053
LED01, LED02	AZC1054

6.4 P.C.BOARD PATTERNS

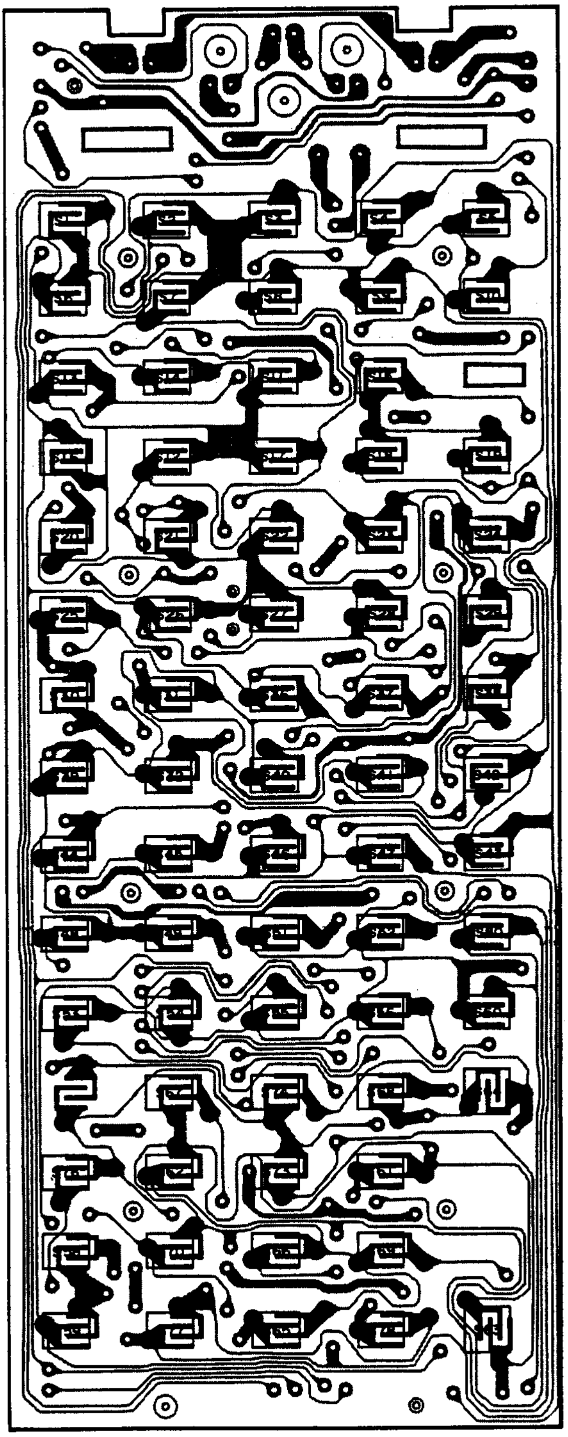
NOTE :

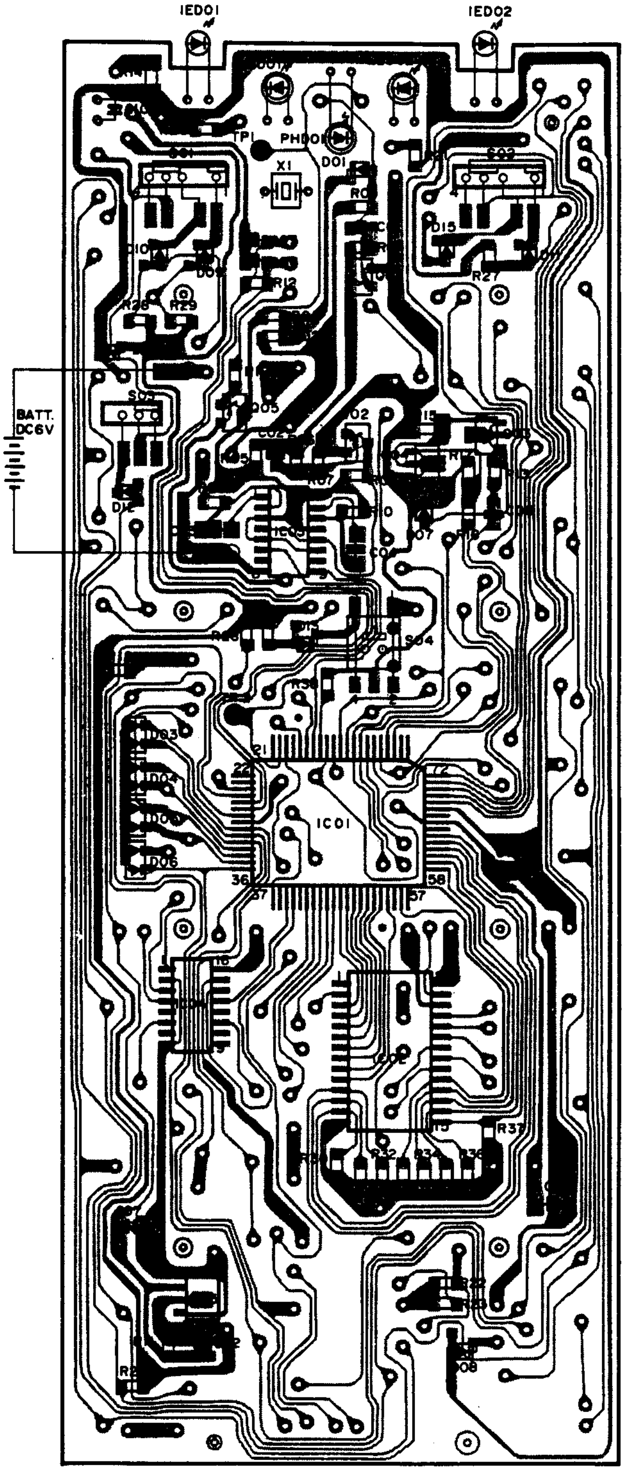
—▭— : Indicates a chip resistor.

—▮— : Indicates a chip capacitor.

⊠ : Indicates a chip transistor.

⊣▶⊢ : Indicates a chip diode.




IED01
IED02
BATT.
DC6V
TP1
PHD01
X1
D01
S01
S02
S05
S04
R12
R26
R29
R27
D15
D05
R07
D12
IC01
IC03
D03
D04
D06
R37
R32
R34
R36
21
22
36
37
57
58
72

7. FOR VSX-9500S/SD/G, VSX-7500S/KUC AND SD/G TYPES

CONTRAST OF MISCELLANEOUS PARTS

NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

The VSX-9500S/SD/G, VSX-7500S/KUC and SD/G types are the same as the VSX-9500S/KUC type with the exception of the following sections.

Mark	Symbol & Description	Part No.				Remarks
		VSX-9500S/ KUC type	VSX-9500S/ SD/G type	VSX-7500S/ KUC type	VSX-7500S/ SD/G type	
	AF assembly	AWZ2507	AWZ2507	AWZ2518	AWZ2518	
	MOTOR VOL assembly	AWZ2509	AWZ2509	AWZ2519	AWZ2519	
	VIDEO/SUR/CONTROL assembly	AWZ2511	AWZ2511	AWZ2520	AWZ2520	
	FRONT CONTROL A assembly	AWZ2513	AWZ2513	AWZ2521	AWZ2521	
	FRONT CONTROL B assembly	AWZ2514	AWZ2514	AWZ2522	AWZ2522	
	METER AMP assembly	AWZ2515	AWZ2515	AWZ2523	AWZ2523	
	REAR AMP assembly	AWZ2516	AWZ2516	AWZ2524	AWZ2524	
	S TERM./CENTER SP assembly	AWK1219	AWK1219	....	....	
	S TERM./MULTI ROOM assembly	....	....	AWK1222	AWZ1222	
	PRO LOGIC assembly	AWX1025	AWX1025	....	....	
⚠	T1 Power transformer (AC120V)	ATS1205	....	ATS1144	....	
⚠	T1 Power transformer (AC110V, 120V−127V, 220V, 240V)	....	ATS1206	....	ATS1145	
⚠	S3 Line voltage selector switch (AC110V,120V−127V,220V,240V)	....	AKX−507	....	AKX−507	
⚠	S2 Line voltage selector switch (AC110V−127V,220V−240V)	....	AKX1004	....	AKX1004	
	S4 Slide switch (75μS−50μS)	....	ASH−004	....	ASH−004	
⚠	FU1 Fuse (10A/125V)	AEK−310	....	AEK−310	....	
⚠	FU1,FU2 Fuse (6A/125V)	....	AEK−109	....	AEK−109	
⚠	Q9 Transistor	2SC3180N	2SC3180N	....	....	
⚠	Q10 Transistor	2SA1263N	2SA1263N	....	....	
⚠	Fuse holder	....	AKR−032	....	AKR−032	
⚠	AC Power cord	ADG1031	ADG1015	ADG1031	ADG1015	
⚠	Hinge knob	AAD1396	AAD1396	AAD1397	AAD1397	
	Mica sheet	AEC−818	AEC−818	....	....	For Q9,Q10
	Mica sheet	AEE1033	AEE1033	....	....	For Q1∼Q4
	Mica sheet	....	....	AEC1123	AEC1123	For Q1∼Q4
	Front panel	ANB1302	ANB1302	ANB1303	ANB1303	

Mark	Symbol & Description	Part No.				Remarks
		VSX-9500S/ KUC type	VSX-9500S/ SD/G type	VSX-7500S/ KUC type	VSX-7500S/ SD/G type	
	Insulator assembly	AMR1434	AMR1434	AMR1350	AMR1350	
	Insulator assembly	AMR1435	AMR1435	AMR1353	AMR1353	
	Bush	ABF1018	ABF1018	···············	···············	For Q1~Q4
	Screw	···············	VMZ26P040FZK	···············	VMZ26P040FZK	For assembling S4
	Screw	ABA1009	ABA1009	ABA1063	ABA1063	For assembling REAR AMP assembly
	Washer	ABE−053	ABE−053	ABE−061	ABE−061	
	Packing case	AHD1620	AHD1621	AHD1622	AHD1623	
	Spacer	···············	AHB1006	···············	AHB1006	For packing

AF assembly (AWZ2518)

The AF assembly (AWZ2518) is the same as the AF assembly (AWZ2507) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2507	AWZ2518	
	C189	···············	CEAS100M25	
	C207,C208	CMA270J500	CCCSL270K500	
	C505,C506 (6800μF/DC42)	ACH1110	···············	
	C505,C506 (5600μF/DC42)	···············	ACH1047	
	R191,R192	···············	RD1/8PM153J	
	R193,R194,R196	···············	RD1/8PM102J	
	R195	···············	RD1/8PM273J	

MOTOR VOL assembly (AWZ2519)

The MOTOR VOL assembly (AWZ2519) is the same as the MOTOR VOL assembly (AWZ2509) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2509	AWZ2519	
	VR671 Variable resistor with motor	ACX1016 (100k×2, 50k×3)	ACX1015 (100k×2, 50k×3)	

FRONT CONTROL B assembly (AWZ2522)

The FRONT CONTROL B assembly (AWZ2522) is the same as the FRONT CONTROL B assembly (AWZ2514) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2514	AWZ2522	
	S866,S867	ASG1029	···············	

VIDEO/SUR/CONTROL assembly (AWZ2520)

The VIDEO/SUR/CONTROL assembly (AWZ2520) is the same as the VIDEO/SUR/CONTROL assembly (AWZ2511) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2511	AWZ2520	
	C444,C445	CEAS2R2M50	···············	
	R458	RD1/8PM392J	···············	
	R460	RD1/8PM102J	···············	
	R515	RD1/8PM223J	···············	
	CN11	KPE12	KPE15	
	CN12	KPE8	···············	
	CN19	KPE3	···············	
	CN20	KPC5	···············	
	1P Pin jack	AKB1010	···············	
	6P Pin jack	AKB1093	···············	
	3P Pin jack	···············	AKB1092	
	4P Pin jack	···············	AKB1007	

FRONT CONTROL A assembly (AWZ2521)

The FRONT CONTROL A assembly (AWZ2521) is the same as the FRONT CONTROL A assembly (AWZ2513) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2513	AWZ2521	
	Q812	RN2203	···············	
	D814−D817	1SS252	···············	
	S854,S855	ASG−711	···············	
	R822	RD1/8PM104J	···············	
	R834	···············	RA5S103J	

METER AMP assembly (AWZ2523)

The METER AMP assembly (AWZ2523) is the same as the METER AMP assembly (AWZ2515) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2515	AWZ2523	
	C636	···············	CEAS010M50	
	R635	RD1/8PM334J	···············	
	R661,R662	···············	RD1/8PM105J	
	R669	···············	RD1/8PM274J	

REAR AMP assembly (AWZ2524)

The REAR AMP assembly (AWZ2524) is the same as the REAR AMP assembly (AWZ2516) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2516	AWZ2524	
	IC603	UPC1270H	....	
	Q603	2SC2458	....	
	C619	CEAS2R2M50	....	
	C620	CKMYB102K50	....	
	C621	CEHAQ101M10	....	
	C622	CCMSL270J50	....	
	C623	CEAS100M50	....	
	C624	CFTXA333J50	....	
	C625	CKDYF103Z50	....	
	R621,R623	RD1/8PM222J	....	
	R622	RD1/8PM563J	....	
	R624	RD1/8PM473J	....	
	R625	RD1/8PM684J	....	
	R626	RD1/8PM122J	....	
	R627	RD1/8PM102J	....	
	R628	RD1/8PM123J	....	
	R629 (0.22×2)	ACN−131	....	

S TERM./MULTI ROOM assembly (AWK1222)

The S TERM./MULTI ROOM assembly (AWK1222) is the same the S TERM./CENTER SP assembly (AWK1219) with the exception of the following sections.

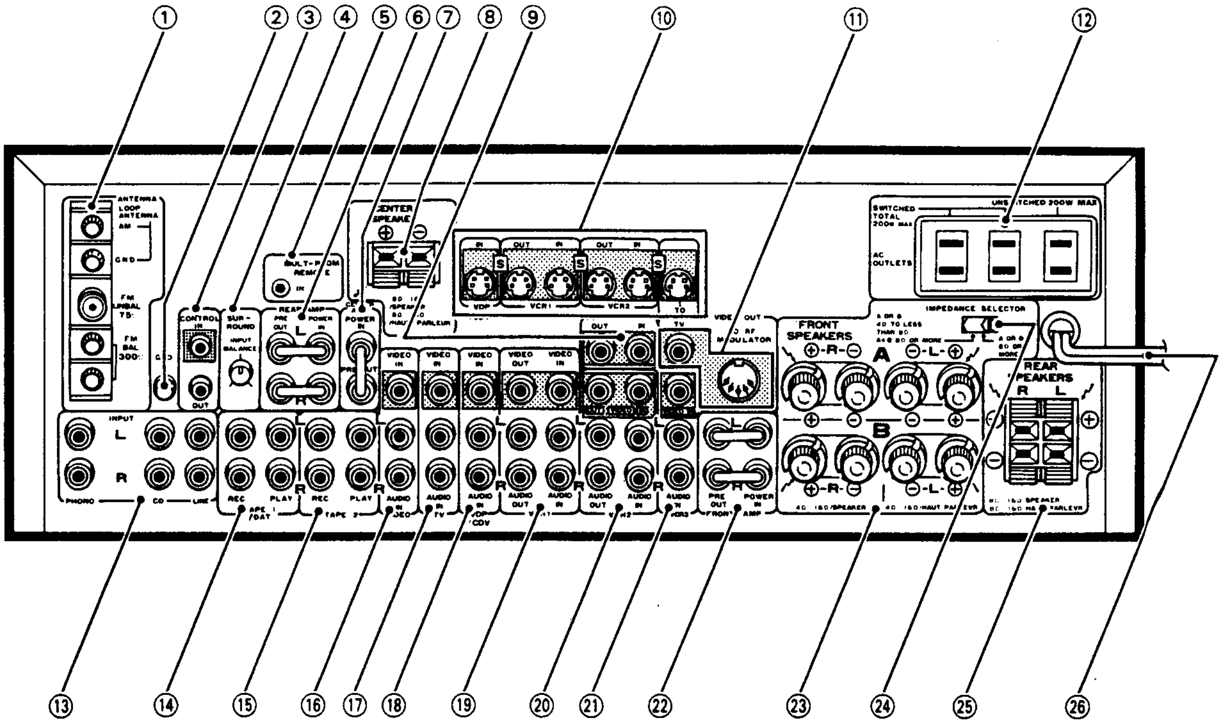
Mark	Symbol & Description	Part No.		Remarks
		AWK1219	AWK1222	
	Q926	RN1201	....	
	D905,D906	1SS252	....	
	RY901	ASR1005	....	
	L901 (0.7μH)	ATH1011	....	
	C926	CFTXA104J50	....	
	R958,R959	RD1/4PMF4R7J	....	
	R960	RD1/8PM183J	....	
	CN51, CN52	KPC3	....	
	2P Speaker terminal (Center SP)	AKE−058	....	

8. PANEL FACILITIES

REAR PANEL

VSX-9500S

* Illustrations show U.S. models.


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
ANTENNA
LOOP ANTENNA
AM
GND
FM UNBAL 75Ω
FM BAL 300Ω
CONTROL IN
OUT
SURROUND
INPUT BALANCE
MULTI-ROOM REMOTE IN
REAR AMP
PRE OUT
POWER IN
CENTER SPEAKER
VIDEO IN
VIDEO OUT
VDP
VCR1
VCR2
TV
VIDEO OUT TO RF MODULATOR
SWITCHED TOTAL 200W MAX
UNSWITCHED 200W MAX
AC OUTLETS
IMPEDANCE SELECTOR
FRONT SPEAKERS
A
B
REAR SPEAKERS
INPUT
L
R
PHONO
CD
LINE
REC
PLAY
TAPE 2
AUDIO
PRE OUT
POWER IN
FRONT AMP
⑬
⑭
⑮
⑯
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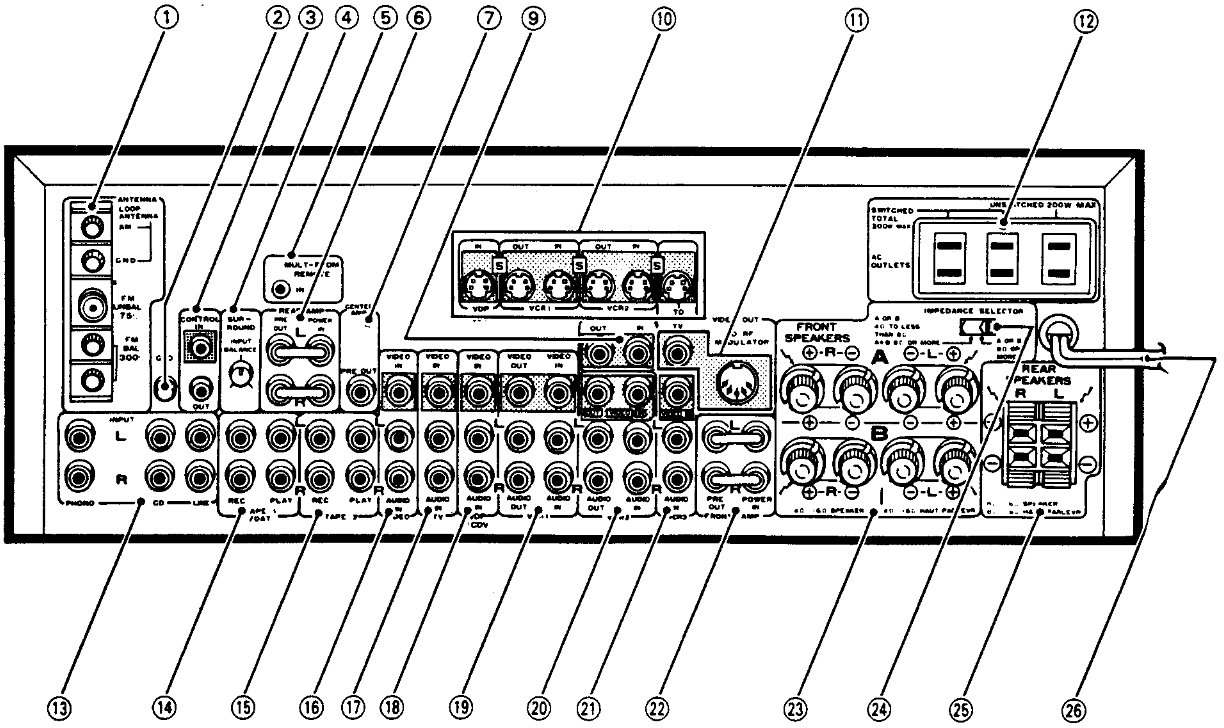
VSX-7500S


①
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⑥
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⑩
⑪
⑫
ANTENNA
LOOP ANTENNA
AM
GND
FM UNBAL 75Ω
FM BAL 300Ω
CONTROL IN
OUT
SURROUND
INPUT BALANCE
MULTI-ROOM REMOTE IN
REAR AMP
PRE OUT
POWER IN
CENTER AMP
PRE OUT
VIDEO IN
VIDEO OUT
VDP
VCR1
VCR2
TV
VIDEO OUT TO RF MODULATOR
SWITCHED TOTAL 200W MAX
UNSWITCHED 200W MAX
AC OUTLETS
IMPEDANCE SELECTOR
FRONT SPEAKERS
A
B
REAR SPEAKERS
INPUT
L
R
PHONO
CD
LINE
REC
PLAY
TAPE 2
AUDIO
PRE OUT
POWER IN
FRONT AMP
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① FM/AM ANTENNA terminals

Use these antenna terminals for reception of normal FM and AM broadcasts.

Attach the accessory AM Loop and FM T-type antennas, here.

- For details regarding antenna connection, see the section "Hints for Better Reception" on page 45.

② GND terminal

Connect the turntable ground lead to this terminal.

③ CONTROL IN, OUT jacks

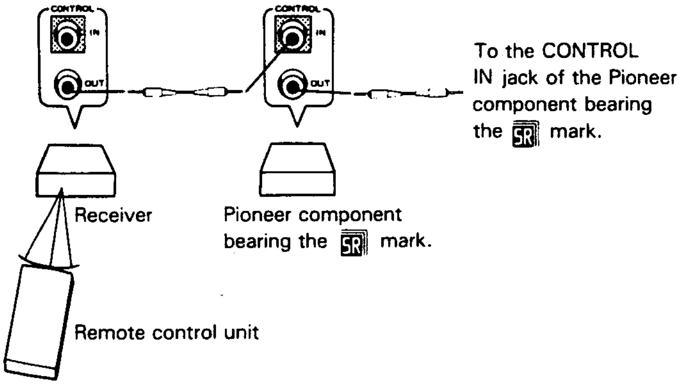
Used for system control with other Pioneer components bearing the SR mark.

IN .... For connection from the CONTROL OUT jack of another component.

OUT.... For connection to the CONTROL IN jack of another component.

NOTE:

The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.


CONTROL
IN
OUT
CONTROL
IN
OUT
To the CONTROL IN jack of the Pioneer component bearing the SR mark.
Receiver
Pioneer component bearing the SR mark.
Remote control unit

④ SURROUND INPUT BALANCE control (DOLBY SURROUND)

[VSX-7500S]

This knob is for adjusting the balance of the DOLBY SURROUND input signal. To adjust, apply a monaural sound signal and rotate until the SURROUND (rear) sound becomes minimal. (See page 31.)

[VSX-9500S]

Set the front panel PRO LOGIC CENTER MODE switch to the OFF position. Play back a monaural source. Then adjust balance so that you hear minimum volume from all channels. (See page 31.)

⑤ MULTI-ROOM REMOTE IN jack.

When using the optional MR-100 adaptor for multi-room remote control, connect to this jack.

⑥ REAR AMP jacks

[PRE OUT]

When a separate power amplifier is used to drive the rear speakers, connect the power amplifier to these jacks.

[POWER IN]

When a separate pre-amplifier is used for rear speakers and this unit is used as a power amplifier, connect the pre-amplifier to these jacks.

⑦ CENTER AMP jacks

[POWER IN] (VSX-9500S only)

When a separate pre-amplifier is used for center speaker and this unit is used as a power amplifier, connect the pre-amplifier to this jack.

[PRE-OUT]

When a separate power amplifier is used to drive the center speaker, connect the power amplifier to this jack.

⑧ CENTER SPEAKER terminal (VSX-9500S only)

Connect the center speaker here.

NOTE:

Use a center speaker with an impedance from 8 ohms to 16 ohms.

⑨ VIDEO ADAPTOR jacks

Use to connect a video adaptor component such as a video enhancer or color corrector.

⑩ S (connector) video jacks

When used in conjunction with a VCR, VDP or monitor TV equipped with S video jacks, connect to these jacks.

⑪ VIDEO OUT jacks

Use to connect a TV set for watching program materials from a VCR or VDP connected to this unit.

[TO MONITOR TV jack]

Connect to a monitor TV or a TV set with video input terminals.

- If monitor with S-VHS input connector is used, you also need line out to video monitor.

[TO RF MODULATOR jack]

Use to connect a conventional TV set. When performing connections, the RF MODULATOR JA-RF5 (sold separately) is required. By connecting an RF modulator, video signal can be converted to VHF signal (U.S. channel 3 or 4), thus allowing this unit to be used to view the selected source on a conventional television set.

NOTE

- *A "conventional TV set" has an antenna input terminals only.*
- *Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdown may occur when conductors come into contact with each other.*
- *Don't connect the TO MONITOR TV VIDEO OUT (RCA pin jack and S jack) and the TO RF MODULATOR jack to the same set at the same time.*

⑫ AC OUTLETS

[U.S. and Canadian models]

SWITCHED TOTAL 200 W MAX (VSX-9500S)

Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 200 W.

SWITCHED TOTAL 300 W MAX (VSX-7500S)

Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 300 W.

UNSWITCHED 200 W MAX

Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 200 W.

[Multi-voltage model]

SWITCHED TOTAL 100 W MAX

Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W.

UNSWITCHED 100 W MAX

Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W.

NOTE:

- *This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.*
- *Do not connect appliances with high power consumption such as heaters, irons, or television sets to these AC OUTLETS in order to avoid overheating and fire risk.*
  This can cause the receiver to malfunction.

⑬ Audio INPUT jacks

PHONO .... Connect to turntable.

CD .... Connect to compact disc player.

LINE .... Connect to the audio output jacks of an additional audio component.

⑭ TAPE 1/DAT jacks

Connect a DAT (digital audio tape deck) or your primary analog cassette deck to these jacks.

Connection for Recording

The tape recording jack (TAPE REC) on the cassette deck or DAT should be connected to the REC side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

Connection for Playback

Connect the TAPE PLAY jack on the cassette deck or DAT to the PLAY side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

⑮ TAPE 2 jacks

Connect a second cassette deck to these jacks.

Connection for Recording

The tape recording jack (TAPE REC) on the cassette deck should be connected to the REC side of the TAPE 2 jack on the receiver with a pin plug connecting cord.

Connection for Playback

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 jack on the receiver with a pin plug connecting cord.

⑯ VIDEO jacks (input)

Connect the output jacks of video components.
For example, connect a playback-only VCR or a video camera.

⑰ TV jacks (input)

Use these jacks if wish to connect a TV tuner having both video and audio outputs.

[VIDEO IN]

Connect the TV tuner's VIDEO OUTPUT to this jack.

[AUDIO IN (L, R)]

Connect the TV tuner's AUDIO OUTPUT to these jacks.

⑱ VDP/CDV jacks

[VIDEO IN]

When watching the video image from a LD player (VDP/CDV player) (or a VCR used for playback), connect its VIDEO OUTPUT jack here.

[AUDIO IN (L,R)]

When playing back the audio channel from a LD player (VDP/CDV player) or a VCR for playback, connect its AUDIO OUTPUT jacks here.

⑲ VCR 1 jacks

[VIDEO IN]

To receive the video image from VCR 1 used for playing, connect its VIDEO OUTPUT jack here.

[AUDIO IN (L, R)]

To receive the audio channels from VCR 1 used for playing, connect its AUDIO OUTPUT jacks here.

[VIDEO OUT]

When copying program material from the video component connected to the VCR 2, VCR 3, VIDEO, VDP/CDV or TV jacks, connect to the VIDEO INPUT jack of the VCR 1 used for recording.

[AUDIO OUT (L, R)]

When copying program material from the video component connected to the VCR 2, VCR 3, VIDEO, VDP/CDV or TV jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR 1 used for recording.

⑳ VCR 2 jacks

[VIDEO IN]

To receive the video image from VCR 2 used for playing, connect its VIDEO OUTPUT jack here.

[AUDIO IN (L, R)]

To receive the audio channels from VCR 2 used for playing, connect its AUDIO OUTPUT jacks here.

[VIDEO OUT]

When copying program materials from the video component connected to the VCR 1, VCR 3, VIDEO, VDP/CDV or TV jack, connect to the VIDEO INPUT jack of the VCR 2 used for recording.

[AUDIO OUT (L, R)]

When copying program materials from the video component connected to the VCR 1, VCR 3, VIDEO, VDP/CDV or TV jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR 2 used for recording.

㉑ VCR 3 input jacks

[VIDEO IN]

To receive the video image from a VCR used for playing only, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

To receive the audio channels from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

㉒ FRONT AMP jacks

[PRE-OUT]

When a separate power amplifier is used to drive the front speakers, connect the power amplifier to these jacks.

[POWER IN]

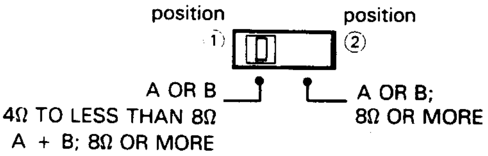
When a separate pre-amplifier is connected and this unit is used as power amplifier, connect the pre-amplifier to these jacks.

㉓ FRONT SPEAKERS terminals

A: Connect to a first set of speakers.
B: Connect to a second set of speakers.
Please refer to item ㉔ Front speakers impedance selector switch.

㉔ Front speakers impedance selector switch

Set this switch to match the impedance of your speakers.



I When using one pair of speakers:

Impedance of a speaker	Selector position
4Ω to less than 8Ω	①
8Ω or more	②

II When using two pairs of speakers:

Select ① as the selector switch position and use speakers having impedance of 8Ω or more.

NOTE:
Turn off the receiver's power before changing the impedance selector switch setting.

㉕ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

Speaker impedance

Connect speaker systems with a nominal impedance of between 8 and 16Ω.

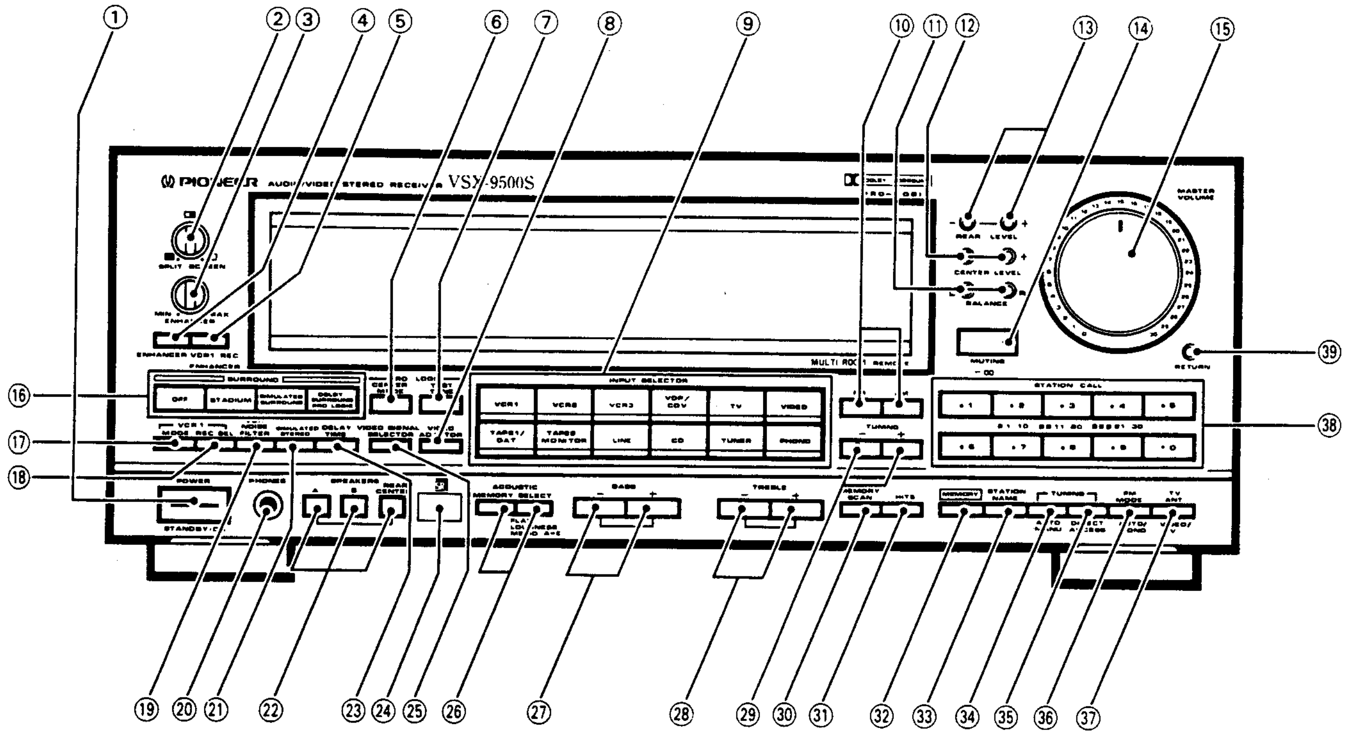
NOTE:
Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

㉖ AC Power cord

Connect to AC wall socket.

FRONT PANEL

VSX-9500S ⑥, ⑦, ⑫ ... VSX-9500S only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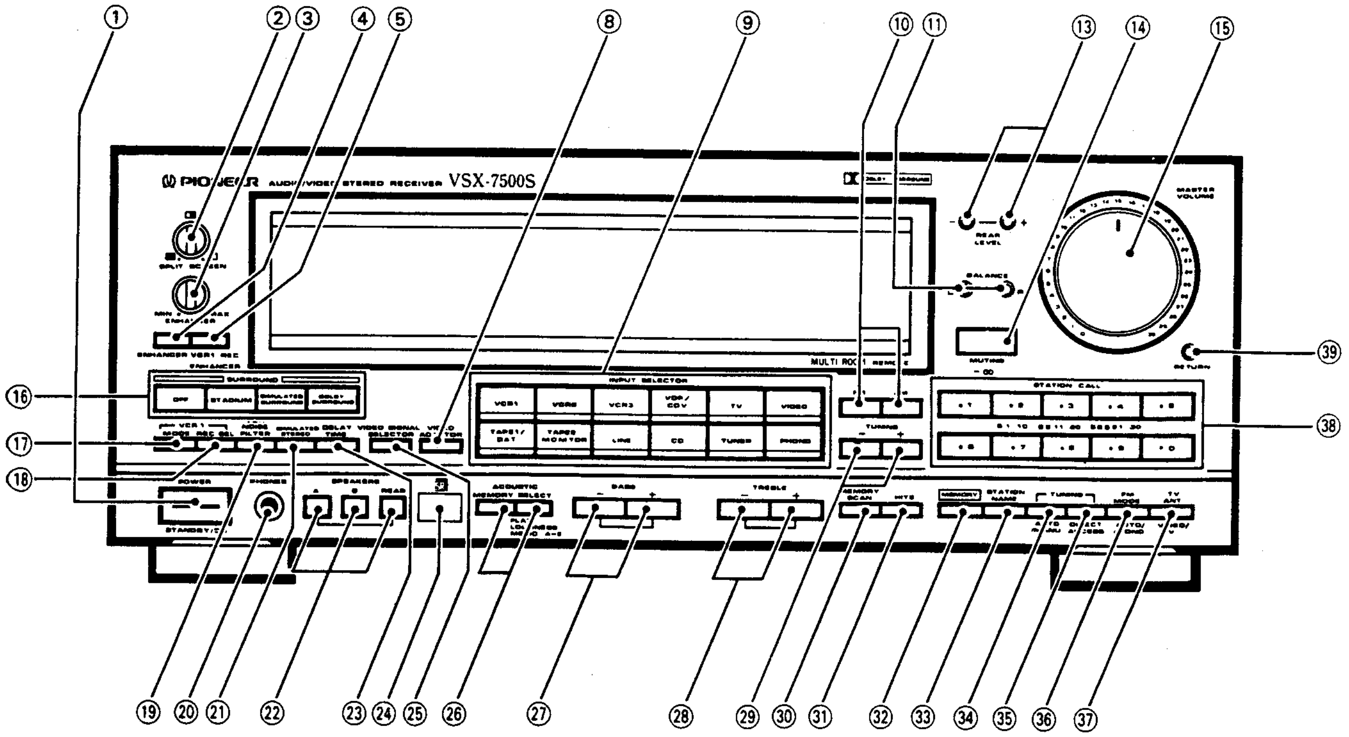
PIONEER
VSX-9500S
MULTI ROOM REMOTE
INPUT SELECTOR
VCR1
VCR2
VCR3
VDP/CDV
TV
VIDEO
TAPE1/DAT
TAPE2 MONITOR
LINE
CD
TUNER
PHONO
SURROUND
OFF
STADIUM
SIMULATED SURROUND
DOLBY SURROUND PRO LOGIC
REAR LEVEL
CENTER LEVEL
BALANCE
MUTING
MASTER VOLUME
RETURN
STATION CALL
TUNING
POWER
STANDBY/ON
PHONES
SPEAKERS
A
B
REAR CENTER
ACOUSTIC MEMORY SELECT
BASS
TREBLE
MEMORY SCAN
HITS
MEMORY
STATION NAME
FM MODE
TV ANT
SPLIT SCREEN
ENHANCER
ENHANCER VCR1 REC

VSX-7500S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PIONEER
VSX-7500S
MULTI ROOM REMOTE
INPUT SELECTOR
VCR1
VCR2
VCR3
VDP/CDV
TV
VIDEO
TAPE1/DAT
TAPE2 MONITOR
LINE
CD
TUNER
PHONO
SURROUND
OFF
STADIUM
SIMULATED SURROUND
DOLBY SURROUND
REAR LEVEL
BALANCE
MUTING
MASTER VOLUME
RETURN
STATION CALL
TUNING
POWER
STANDBY/ON
PHONES
SPEAKERS
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B
REAR
ACOUSTIC MEMORY SELECT
BASS
TREBLE
MEMORY SCAN
HITS
MEMORY
STATION NAME
FM MODE
TV ANT
SPLIT SCREEN
ENHANCER
ENHANCER VCR1 REC

① POWER STANDBY/ON switch

ON: The power to the unit is turned on.

STANDBY: This is equivalent to OFF but in fact a fraction of power still feeds the unit.

- The accessory remote control unit can also be used to turn the receiver on or standby (STANDBY function).

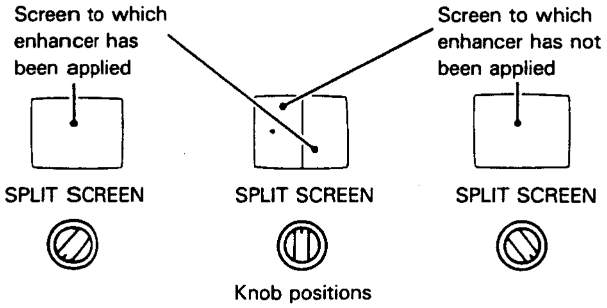
NOTE:

- *When not using the unit for a long period, disconnect the power cord from the AC OUTLETS in the wall.*
- *When the power is initially turned ON, muting is applied to prevent sound from being output for about 5 seconds.*

② SPLIT SCREEN control

This split screen function can be used when the ENHANCER switch is on.

This control allows you to freely control the area of enhanced picture (on right side of screen) and original picture (non-enhanced, on left side of screen) by means of a vertical line dividing the screen into two sections. It has no effect on an S output jack signal.


Screen to which enhancer has been applied
Screen to which enhancer has not been applied
SPLIT SCREEN
SPLIT SCREEN
SPLIT SCREEN
Knob positions

NOTE:

This line is not output from the VCR (VCR 1 and VCR 2) VIDEO OUT jacks. As a result, the split screen image is not recorded; the recorded image will be entirely that produced by the enhancer function.

③ ENHANCER control

When performing tape copying with a VCR, some deterioration in image quality occurs normally. This control allows compensation for this deterioration in image quality by emphasizing image detail. This has no effect on an S output jack signal.

NOTE:

The ENHANCER control functions to suppress image deterioration, but will not improve image quality beyond its original state.

④ ENHANCER switch

Press when performing video copying with added video enhancer effects. When the switch is pressed, the monitored video image will be the split screen picture.

Using the SPLIT SCREEN function will enable you to compare the enhanced and original (non enhanced) images. It has no effect on an S output jack signal.

The ENHANCER switch will not operate if the VCR 1 REC ENHANCER is on (ENHANCER REC indication is lit) while the VCR 1 REC SEL switch is on.

Turn off the VCR 1 REC SEL switch if you want to enhance the signal sent to the MONITOR TV and RF MODULATOR jacks.

⑤ VCR 1 REC ENHANCER switch

Turn this switch ON to record on the VCR connected to the VCR 1 jacks the video image from VCR 2 or VDP with enhancement applied using the ENHANCER control knob. At this time, the enhancer is turned off for the monitor and VCR 2 REC OUT. This has no effect on an S output jack signal.

NOTE:

- *The VCR 1 REC SEL switch must be on for the VCR 1 REC ENHANCER switch to operate.*

⑥ PRO LOGIC CENTER MODE switch (VSX-9500S)

This operates if DOLBY PRO LOGIC SURROUND is ON. Switches between the four DOLBY PRO LOGIC SURROUND center channel settings. The setting changes in the order listed below each time you press the switch.

NORMAL ——	Use this setting when a small enclosure center channel speaker incapable of reproducing frequencies below 100Hz is connected.
WIDE ——	Use this setting when a large enclosure center channel speaker capable of reproducing frequencies below 100Hz is connected.
PHANTOM ——	Use this setting when no center channel speaker is connected.
OFF ——	Select this setting for adjusting input balance. Use a mono (AM radio, etc.) signal and adjust the surround balance control on rear panel so that volume is minimized from all speakers.

NOTES:

- *If no center speaker is used, then mono signals and center channel signal components will not be reproduced at positions other than the PHANTOM position.*
- *To provide for correct surround operation, you must have a stereo source or no output will be heard.*

⑦ PRO LOGIC TEST TONE switch (VSX-9500S)

Only operates when the DOLBY PRO LOGIC SURROUND surround mode is selected. When the switch is turned ON, "TEST" appears on the central display and a test tone approximately two seconds in duration is generated in all channels in succession. Adjust the speaker level controls so that all speakers sound equally loud from the listening position for the optimum surround effect.

NOTE (For VSX-7500S only):

Adjust the center speaker volume level of the amplifier driving the center speaker, if one (such amplifier) is used.

⑧ VIDEO ADAPTOR switch

Press when using a video adaptor component connected to the rear panel VIDEO ADAPTOR terminals. An indicator on the display section lights up when this switch is set to ON. This has no effect on an S output jack signal.

⑨ Audio/Video INPUT SELECTOR switches

VCR 1: Press when performing playback on a VCR unit.

VCR 2: Press when performing playback on a second VCR unit.

VCR 3: Press when performing playback on a third VCR unit.

VDP/CDV: Press when performing playback on a video disc player (VDP) or CDV player.

TV: Press to watch TV broadcasts from the TV tuner connected to the rear panel TV jacks.

VIDEO: Press when performing playback on a VCR connected to VIDEO jack.

TAPE 1/DAT: Press when performing playback on a DAT or cassette deck.

TAPE 2 MONITOR: Press when performing playback on a second cassette deck and when monitoring recording or using a graphic equalizer.

LINE: Press when performing playback on an audio component connected to the LINE jacks.

CD: Press when playing compact discs on a CD player.

TUNER: Press when listening to radio broadcasts.

PHONO: Press when playing records on a turntable.

⑩ BAND selector switches

FM: Press for FM reception.

AM: Press for AM reception.

⑪ BALANCE switches

Use to adjust the sound volume balance between left and right speakers.

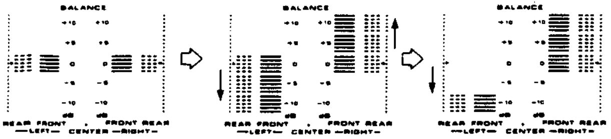
L: Press to decrease the sound on the right side.

R: Press to decrease the sound on the left side.

Press L and R together to bring the volume balance back to standard (left = Right).

NOTE:
The left-right sound volume balance cannot be adjusted independently on the front and rear speakers.

Example: If press and keep the "R" switch



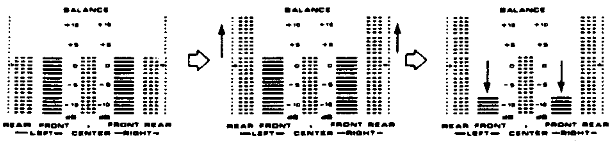
⑫ CENTER LEVEL (+, −) switches (VSX-9500S)

Use these switches to adjust the center speaker sound level to the level of the front speakers.
Operate only when DOLBY PRO LOGIC SURROUND mode is on.
After adjustment, use the MASTER VOLUME control to adjust the overall sound to a suitable level.
− : Lowers the center speaker sound level.
+ : Raises the center speaker sound level.
The level is displayed on the display section BALANCE/LEVEL meters.
Pressing − and + at the same time returns you to the standard.

⑬ REAR LEVEL (−, +) switches

Operate only when the surround mode is on.
These switches are used to preset the sound level difference between the front and rear speakers. In this way, after presetting the difference, the overall volume of the front and rear speakers can be changed using the MASTER VOLUME control, while still maintaining the sound volume differential.
− : Surround rear speaker volume is reduced.
+ : Surround rear speaker volume is increased.
Pressing + and − together will restore front and rear to the standard balance setting.

Example: If press and keep the "+" switch



Operate only when SURROUND mode is on.

⑭ MUTING switch

Press to temporarily cut off the sound volume. The display section MUTING indicator will flash. When pressed again, the sound will return to its previous level.

⑮ MASTER VOLUME control

Use to simultaneously adjust the sound volume from the front and surround speakers.

⑯ SURROUND Mode Selector Switches

OFF:
To cancel the surround function.
STADIUM:
Ideal for sports broadcasts, etc.
SIMULATED SURROUND:
Gives concert-hall presence to monaural sound (AM, TV, etc.).
DOLBY PRO LOGIC SURROUND (VSX-9500S)
DOLBY SURROUND (VSX-7500S)
Select this setting when watching video tapes or video discs bearing the DD DOLBY SURROUND mark.

⑰ VCR 1 MODE switch

Toggles the VCR 1 signal between mono and stereo. It operates both during playback and during recording.

⑱ VCR 1 REC SEL(ECTOR) switch

Use this switch to select the VCR 1 copy mode independent of the INPUT SELECTOR switch setting. Each time you press it the unit switches between the following three settings. The current setting is shown on the central display section.

VCR 2 → VCR 1 → VDP/CDV → VCR 1 → OFF

NOTE:
At the OFF position, the video source selected by the INPUT SELECTOR is output at the REC jack.

⑲ VCR NOISE FILTER switch

If tape hiss is noticeable in the sound while performing playback of video cassette tapes, press this switch to reduce the noise.
After pressing this switch, "VCR NOISE FILTER" will appear on the display section.
This switch can be used when either VCR 1 or VCR 2 INPUT SELECTOR switch is selected. The VCR NOISE FILTER has no effect on VCR 3 playback.

NOTE:
- *The effectiveness in reducing high-frequency hiss noise varies depending on the type of tape used, the recording level, and other conditions.*

⑳ PHONES jack

Connect the plug on your headphones to this jack. To only hear through the headphones, set all SPEAKERS A, B and REAR switches to the OFF position.

㉑ SIMULATED STEREO switch

Press to produce a simulated stereo effect when listening to monaural sources (for example AM or TV broadcasts).
"SIMULATED STEREO" appears on the display section.

NOTE:
There is no sound output from the rear speakers during this operation.

㉒ SPEAKER switches

VSX-9500S: switches A, B, REAR/CENTER.
VSX-7500S: switches A, B, and REAR.
ON/OFF switches for the speaker systems. An indicator on the display section lights when any of these switches is set to ON.

NOTE:
Rear speaker on/off switching is possible only when the surround mode is on.

NOTE FOR VSX-9500S:
Center speaker on/off switching is possible only when the DOLBY PRO LOGIC SURROUND (WIDE or NORMAL) mode is on.

㉓ DELAY TIME switch

Operates only when the surround mode is ON.
Switches the surround delay time in three steps. For DOLBY PRO LOGIC SURROUND (VSX-9500S) DOLBY SURROUND (VSX-7500S), 20 ms is standard.

15 ms → 20 ms → 30 ms

㉔ Remote signal sensor

㉕ VIDEO SIGNAL SELECTOR switch

When recording simulcast programs, the recorded image can be selected among VCR 1, VCR 2, VCR 3, VDP/CDV, TV and VIDEO.

VCR 1 → VCR 2 → VCR 3 → VDP/CDV → TV → VIDEO → OFF

The current setting is shown by an indicator on the display section.

Note that with an S video output jack, the switch is OFF for VCR 3, TV, and VIDEO.

VCR 1 → VCR 2 → OFF → VDP/CDV → OFF → OFF → OFF

NOTE:
- *When using a VCR for sound recording only, follow the operating instructions of the VCR.*
- *During VCR 1 REC SEL use, recording is not possible on VCR 1 using the VIDEO SIGNAL SELECTOR.*

㉖ ACOUSTIC Switch

MEMORY:

Pressing this switch will result in the memorization of the sound quality (tone control condition). Press again to cancel this mode.

SELECT

This switch has three functions:

Each time you press the switch, the sound quality setting advances in the order shown below.

→ FLAT → LOUDNESS → A → B → C → D → E

I **FLAT**: For flat (normal) frequency response.

II **LOUDNESS**: Emphasizes the low- and high- frequency ranges. Produces a fuller sense of sound.

III A—E: Memorized acoustic memory settings.

- To preset the acoustic memories (A—E).
- To recall previously set sound quality settings.

Presetting the acoustic memory

1. Adjust the sound quality as desired using the BASS and TREBLE control switches. LOUDNESS or FLAT only, can also be chosen.
   - Settings are shown by the TONE indicator on the display section.
2. Press the ACOUSTIC MEMORY switch.
   - The TONE indicator on the display section blinks on and off.
3. Press the ACOUSTIC SELECT switch and select the sign to which you wish to assign the setting (A — E).
   - The sound quality setting is memorized approximately two seconds after you last press the ACOUSTIC SELECT switch.

In this way, the desired tone will be preset in one of the five acoustic memory positions. To preset four other desired tone settings, perform the same operations.

To recall the memorized tone settings, press the ACOUSTIC SELECT switch to select the desired memory position. In this way, five different tone settings can be preset and recalled in the five positions of the acoustic memory.

㉗ BASS control switches

Use to adjust the low-frequency level. Press the + switch to increase low-frequency level, and the − switch to decrease it.

The TONE indicator appears on the display section.

When both sides (+, −) of the BASS control are pressed simultaneously, the base response will be set to the flat (normal) condition.

㉘ TREBLE control switches

Use to adjust the high-frequency level. Press the + switch to increase high-frequency level, and the − switch to decrease it.

The TONE indicator appears on the display section.

When both sides (+, −) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition.

㉙ TUNING switches

[When tuning]

+ : Performs tuning in ascending frequency order.
− : Performs tuning in descending frequency order.

[When inputting station names]

+ : Displays the letters in alphabetical order.
− : Displays the alphabet in reverse order.

㉚ MEMORY SCAN switch

Operates when the INPUT SELECTOR is set to TUNER. Station frequencies assigned to the STATION CALL switches are tuned in, one after another, beginning with the current station no., for approximately 5 seconds each. The display section SCAN indicator will light. Press the switch again and the tuner remains tuned in to the station playing when the switch was pressed the second time.

Station frequencies not assigned station numbers in the memory are skipped.

㉛ HITS (Hyper Intelligent Tuning System) switch

- If the HITS switch is pressed at the currently displayed station frequency, the receiver searches up and down the frequency for the next station (The SEARCH indicator in the display section lights at this time.) and stops at the first one it finds.
- If the HITS switch is pressed during STATION NAME input, the receiver performs a memory search in order of ascending station number for memorized stations whose names begin with the same letter as the station just input.
- If the HITS switch is pressed during input of numbers for DIRECT ACCESS tuning, the receiver sets the remaining digits which have not yet been input to "0", searches for the corresponding frequencies, and stops on the first station it finds.

NOTE:
- *The system searches for stations within successive 1MHz ranges for FM and 100 kHz ranges for AM. During DIRECT ACCESS tuning, it searches up and down for a station until it reaches the edges of the band. If no receivable station is found within the band range, the receiver returns to the state it was in before the HITS switch was pressed.*
- *If the upper (or lower) frequency limit of the receiver is encountered during HITS operation, the receiver stops searching in that direction but continues to search in the other.*

㉜ MEMORY switch

When the unit is in the frequency display mode, pressing this switch will result in the memorization of the current broadcast band, reception frequency ACOUSTIC MEMORY position, and FM AUTO/MONO mode. This switch is also used to input station names

㉝ STATION NAME switch

This switch is used when inputting station names

㉞ AUTO/MANUAL TUNING selector switch

This switch is used to select the tuning mode. The AUTO tuning mode has been selected when the TUNING AUTO indicator lights.

AUTO tuning

When the − or + TUNING switch is pressed, the receiver automatically scans the broadcast station frequencies. When a broadcast is detected, the scanning stops at that frequency.

NOTE:
Pressing the TUNING switch (− or +) while scanning is taking place causes scanning to stop.

MANUAL tuning

This is the usual tuning method. Each time the − or + TUNING switch is pressed, the reception frequency is changed by one channel step. When pressed continuously, the receiver scans the broadcast frequencies continuously.

㉟ DIRECT ACCESS TUNING switch

When this switch is pressed, the STATION CALL switches function as ten-key number switches for direct input of the desired reception frequency.

If the input station falls outside of the receiver's tuning range, the display section will display a message: "UPPER" if the frequency is too high and "LOWER" if it is too low.

㊱ FM MODE AUTO/MONO selector switch

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator in the display section is lit.

Auto stereo mode:
Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

Monaural mode:
When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:
This switch has no effect on reception of AM broadcasts.

㊲ TV ANT (VIDEO/TV) selector switch

This switch can be used in place of the TV ANT switch on the RF Modulator JA-RF5 (sold separately). This is effective only when the JA-RF5's TV ANT switch is set to the VIDEO position.
For example:

In VIDEO mode (TV-ANT indicator in the display section goes out):
Allows you to use video components connected to the receiver.

In TV mode (TV-ANT indicator in the display section lights):
Connects the TV antenna, thus allowing you to view normal TV broadcasts. The TV mode is selected while the receiver's power is off.

NOTE:

- *When in the VIDEO mode, no sound will be produced from the TV set's speakers. Listen using the speakers connected to the receiver.*
- *Noise may be produced if the TV set's volume control is turned up. Turn down the set's volume control when listening.*
- *This switch functions only when the TV ANT selector switch on the RF Modulator is set to "VIDEO."*
- *This switch is set to VIDEO when the power is turned on.*

㊳ STATION CALL RANDOM 30 CH switches

- These switches are used to preset and recall desired broadcasting stations, "AUTO STEREO"/"MONO" switch setting, and ACOUSTIC MEMORY mode.

Station call operation example:
If you press the $\boxed{*2}$ key:

- One time – station 2 is selected.
- Two times – station 12 is selected.
- Three times – station 22 is selected.

NOTE:
Pressing the STATION CALL switches when a component other than TUNER is selected causes the INPUT SELECTOR setting to switch to TUNER.

- They are also used when performing direct access tuning.

㊴ RETURN switch

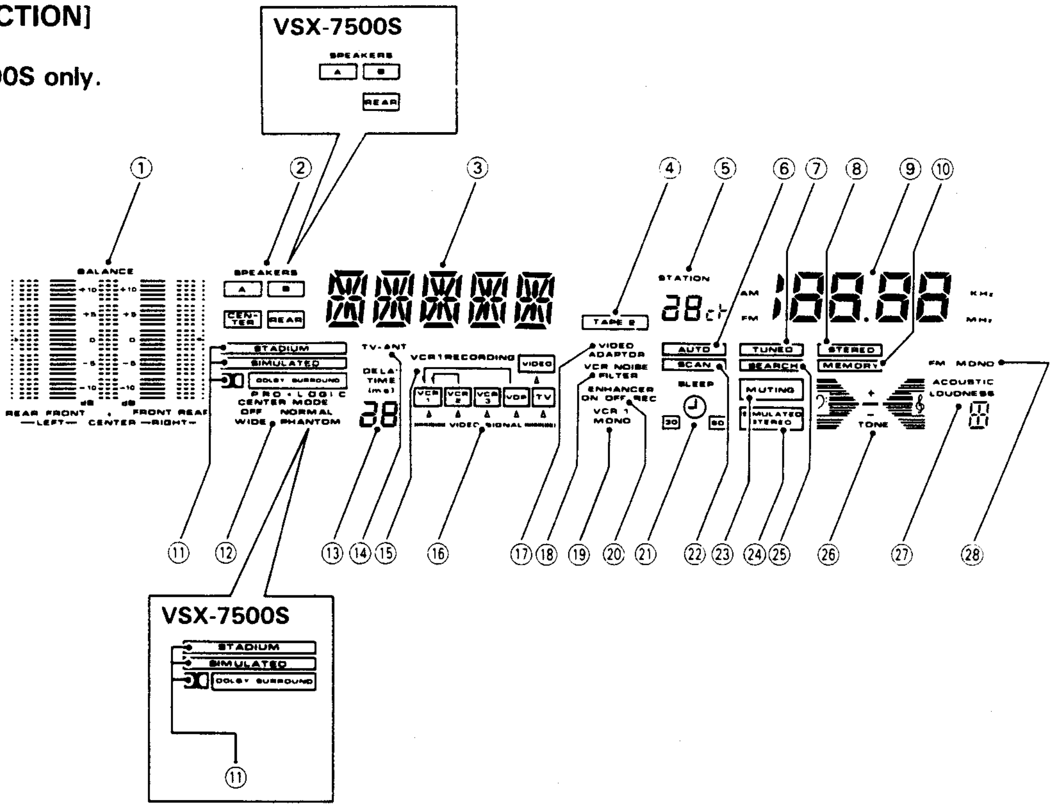
Pressing this switch returns the receiver to the following settings, the sound level being controlled by MASTER VOLUME control knob.

• TAPE 2 MONITOR	OFF
• SURROUND MODE	FF
• SPEAKERS A	ON
• MUTING	OFF
• FRONT BALANCE	CENTER
• FUNCTION	TUNER
• STATION CALL	1 CH *
• VIDEO ADAPTOR	OFF

- When a station is not memorized in 1 CH, station search will automatically proceed from the frequency displayed.

[DISPLAY SECTION]

⑫ ... VSX 9500S only.


VSX-7500S
SPEAKERS
A
B
REAR
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
BALANCE
REAR FRONT
—LEFT— CENTER —RIGHT—
FRONT REAR
CEN-TER
REAR
STADIUM
SIMULATED
DOLBY SURROUND
PRO·LOGIC
CENTER MODE
OFF NORMAL
WIDE PHANTOM
TV-ANT
DELAY TIME (ms)
VCR1 RECORDING
VIDEO
VCR 1
VCR 2
VCR 3
VDP
TV
VIDEO SIGNAL
TAPE 2
STATION
AM
FM
KHz
MHz
VIDEO ADAPTOR
VCR NOISE FILTER
ENHANCER ON OFF REC
VCR 1 MONO
SLEEP
30
60
AUTO
SCAN
TUNED
SEARCH
STEREO
MEMORY
MUTING
SIMULATED STEREO
TONE
FM MONO
ACOUSTIC LOUDNESS
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑
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㉘
VSX-7500S
STADIUM
SIMULATED
DOLBY SURROUND
⑪

[DISPLAY SECTION]

① **BALANCE/LEVEL meters**

② **SPEAKERS indicators**

Shows which speaker system (or systems) are switched ON.

③ **Function & Station name display**

④ **TAPE 2 indicator**

Lights when the INPUT SELECTOR is set to TAPE 2 MONITOR ON.

⑤ **STATION display**

Shows the channel selected with the STATION CALL switch.

⑥ **AUTO indicator**

Lights when the AUTO/MANUAL TUNING is set to AUTO.

⑦ **TUNED indicator**

Lights when a station is tuned.

⑧ **STEREO indicator**

Lights when a stereo FM broadcast is being received.

⑨ **Frequency display**

⑩ **MEMORY indicator**

⑪ **Surround mode indicators**

⑫ **DOLBY PRO LOGIC SURROUND CENTER MODE indicators (VSX-9500S only)**

Displays the mode selected with the CENTER MODE switch.

⑬ **DELAY TIME display**

Shows the delay time during surround operation.

⑭ **TV-ANT indicator**

Lights when TV mode is selected with the TV ANT switch.

⑮ **VCR 1 RECORDING display**

Displays a " ↓‾‾‾‾| " symbol to indicate the copy mode selected with the VCR 1 REC SEL switch.

⑯ **VIDEO SIGNAL SELECTOR indicators**

Shows the video component selected with the VIDEO SIGNAL SELECTOR switch.

⑰ **VIDEO ADAPTOR indicator**

Lights when the VIDEO ADAPTOR switch is in the ON position.

⑱ **VCR NOISE FILTER indicator**

Lights when the VCR NOISE FILTER switch is in the ON position.

⑲ **VCR 1 MONO indicator**

⑳ **ENHANCER ON, OFF, REC indicators**

Shows the current VIDEO enhancer setting.

㉑ **SLEEP timer indicators**

Shows the SLEEP timer setting (the length of time from the set time to the point at which power will switch off). Only activated by remote control.

㉒ **SCAN indicator**

Lights during memory scan operation.

㉓ **MUTING indicator**

㉔ **SIMULATED STEREO indicator**

㉕ **SEARCH indicator**

Lights during HITS operation.

㉖ **TONE level indicators**

Shows the settings of the BASS and TREBLE level.

㉗ **ACOUSTIC display**

Shows the setting of the ACOUSTIC SELECT switch.

㉘ **FM MONO indicator**

Lights when the FM MONO mode is selected with the FM MODE switch.

9. SPECIFICATIONS

Amplifier section

[POWER AMP IN]

Continuous average power output of 125 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.005 % total harmonic distortion (front); 30 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.08 %** total harmonic distortion (rear); 30 watts*, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.08 %** total harmonic distortion (center: VSX-9500S only).**

Dynamic power (2 Ω/4 Ω/8 Ω) .... 280 W/260 W/185 W

Audio section

Damping Factor
  1 kHz, 8 Ω 100
Input (Sensitivity/Impedance)
  PHONO MM .... 2.5 mV/47 kΩ
  CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,
  VDP/CDV, VCR 1, VCR 2, VCR 3...................... 150 mV/47 kΩ
  POWER AMP IN .... 1 V/47 kΩ
Phono Overload Level (T.H.D. 0.08 %, 1000 Hz)
  PHONO MM .... 150 mV
Frequency Response
  PHONO MM .... 20 Hz to 20,000 Hz ±0.3 dB
  CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,
  VDP/CDV, VCR 1, VCR 2, VCR 3....... 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)
  TAPE 1/DAT REC, TAPE 2 REC, VCR 1 OUT,
  VCR 2 OUT .... 150 mV/2.2 kΩ
  PRE AMP OUT .... 1 V/220 Ω
Loudness Contour .... +6 dB (100 Hz)
  +3 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)
  PHONO MM .... 82 dB
  CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,
  VDP/CDV, VCR 1, VCR 2, VCR 3 .... 98 dB
Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]
  PHONO MM .... 77 dB
  CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,
  VDP/CDV, VCR 1, VCR 2, VCR 3................................ 80 dB

VIDEO Section

Input (Sensitivity/Impedance)
  VCR 1, VCR 2, VCR 3, VDP/CDV, TV, VIDEO,
  ADAPTOR .... 1 Vp-p/75 Ω
Output (Level/Impedance)
  VCR 1, VCR 2, ADAPTOR, MONITOR .... 1 Vp-p/75 Ω
Frequency Responce
  VCR 1, VCR 2, VCR 3, VDP/CDV, TV, VIDEO,
  ADAPTOR→MONITOR .... 5 Hz — 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio .... 55 dB
  Cross Talk .... 55 dB (3.58 MHz)
  Enhancer .... ±3 dB (2 MHz)

[S terminals]

Input (Sensitivity/impedance)
  VCR 1, VCR 2, VDP/CDV .... Luminance signal: 1 Vp-p/75 Ω
  Color difference signal: 0.286 Vp-p/75 Ω
Output (Level/impedance)
  VCR 1, VCR 2, TO MONITOR TV. Luminance signal: 1 Vp-p/75 Ω
  Color difference signal: 0.286 Vp-p/75 Ω
Frequency response
  Luminance signal............................. 10 Hz to 10 MHz, $^{+0}_{-3}$ dB
Signal-to-Noise Ratio
  Luminance signal.. 55 dB
Cross talk.. 55 dB (3.58 MHz)

Surround section

Input (Sensitivity/Impedance)
  REAR POWER AMP IN.. 1 V/47 kΩ
  CENTER POWER AMP IN .... 1 V/47 kΩ
Output (Level/Impedance)
  REAR PRE AMP OUT .... 1 V/470 Ω
  CENTER PRE AMP OUT
  VSX-9500S .... 1 V/470 Ω
  VSX-7500S .... 2 V/470 Ω

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono; 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity	Mono; 15.3 dBf, (1.6 μV/75 Ω)
	Stereo; 37.0 dBf, (19.5 μV/75 Ω)
Signal-to-Noise Ratio	Mono; 80 dB (at 65 dBf)
	Stereo; 75 dB (at 85 dBf)
Distortion	Mono; 0.08 % (100 Hz)
	0.08 % (1 kHz)
	0.2 % (6 kHz)
	Stereo; 0.2 % (100 Hz)
	0.15 % (1 kHz)
	0.3 % (6 kHz)
Capture Ratio	1.0 dB
Alternate Channel Selectivity	65 dB (400 kHz)
Stereo Separation	50 dB (1 kHz)
Frequency Response	30 Hz to 15 kHz $^{+0.5}_{-2.0}$ dB
Image Interference Ratio	50 dB
IF Interference Ratio	80 dB
AM Suppression Ratio	55 dB
Spurious Interference Ratio	70 dB
Antenna Input	300 Ω balanced 75 Ω unbalanced

AM Tuner Section

Frequency range	When 10 kHz step: 530 kHz — 1,700 kHz
	When 9 kHz step: 531 kHz — 1,602 kHz
Sensitivity (IHF, Loop antenna)	300 μV/m
Selectivity	30 dB
Signal-to-Noise Ratio	50 dB
Image Interference Ratio	40 dB
IF Interference Ratio	65 dB
Antenna	Loop antenna

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Miscellaneous

Power requirements	
U.S., Canadian models	AC 120V, 60 Hz
Other destination models	AC 110/120—127/220/240V (switchable), 50/60 Hz
Power consumption	
U.S., Canadian models	
VSX-9500S	580 W, 750 VA
VSX-7500S	550 W, 660 VA
Other destination models	
VSX-9500S	900 W
VSX-7500S	800 W
In stand by condition	3 W
AC Outlets	
U.S. and Canadian models	
VSX-9500S	SWITCHED x 2: TOTAL 200 W MAX
	UNSWITCHED x 1: 200 W MAX
VSX-7500S	SWITCHED x 2: TOTAL 300 W MAX
	UNSWITCHED x 1: 200 W MAX
Other destination model	SWITCHED x 2: TOTAL 100 W MAX
	UNSWITCHED x 1: TOTAL 100 W MAX
Dimensions	420 (W) x 155.5 (H) x 421 (D) mm
	16-9/16 (W) x 6-1/8 (H) x 15-9/16 (D) in
Weight (without package)	
U.S. and Canadian models	
VSX-9500S	13.6 kg (30 lb)
VSX-7500S	12.4 kg (27 lb 5 oz)
Other destination models	
VSX-9500S	13.7 kg (30 lb 3 oz)
VSX-7500S	12.9 kg (28 lb 7 oz)

Furnished Parts

FM T-type antenna	1
AM Loop antenna	1
Dry cell battery (LR03/AM-4)	4
Remote control unit	1
Operating Instructions	1
Templates added	2

NOTE:
Specifications and the design subject to possible modifications without notice due to improvements.

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*
** *Measured by Audio Spectrum Analyzer.*